GREENTEL
Simplifying Wireless M2M

GREENTEL Serial Device Server

User Manual

For SE1001 1 Port RS232/RS422/RS485

SE1002 2 Ports RS232/RS422/RS485

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Announcements

Thank you for choosing our product. GREENTEL SE100x provides high performance serial to Ethernet connectivity, allows 8 simultaneously access to one port.

GREENTEL SE100x supports TCP server, TCP client, UDP, TCP Virtual Port, Multi screens TTY, PPP dialout/daemon, Line printer daemon mode.

GREENTEL SE100x has RS232, RS422 or RS485 (2 and 4 wire support).

Applications such as POS, Access Control and Any Serial Port Connectivity.

Please read this manual carefully before using the product.

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Information Edition: GL – A – SE100x – 1.3

WEEE Notice

The Directive on Waste Electrical and Electronic Equipment (WEEE), which entered into force as European law on 13th February 2003, resulted in a major change in the treatment of electrical equipment at end-of-life.
The purpose of this Directive is, as a first priority, the prevention of WEEE, and in addition, to promote the reuse, recycling and other forms of recovery of such wastes so as to reduce disposal.

The WEEE logo (shown at the left) on the product or on its box indicates that this product must not be disposed of or dumped with your other household waste. You are liable to dispose of all your electronic or electrical waste equipment by relocating over to the specified collection point for recycling of such hazardous waste. Isolated collection and proper recovery of your electronic and electrical waste equipment at the time of disposal will allow us to help conserving natural resources. Moreover, proper recycling of the electronic and electrical waste equipment will ensure safety of human health and environment. For more information about electronic and electrical waste equipment disposal, recovery, and collection points, please contact your local city centre, household waste disposal service, shop from where you purchased the equipment, or manufacturer of the equipment.

1. SE100x Introduction

GREENTEL SE100x provides high performance serial to Ethernet connectivity, allows 8 simultaneously access to one port.
GREENTEL SE100x supports TCP server, TCP client, UDP, TCP Virtual Port, Multi screens TTY, PPP dialout/daemon, Line printer daemon mode.
GREENTEL SE100x has RS232, RS422 or RS485 (2 and 4 wire support).
Applications such as POS, Access Control and Any Serial Port Connectivity.

1.1 Specifications:

Processor	CPU	32 bit 100MHz
	FLASH	8 MB
Serial Interface	Serial Standards (SE1001)	Software selectable RS-232/422/485
	Number of Ports (SE1001)	1
	Connectors for External (SE1001)	DB9 male
	Serial Standards (SE1002)	RS-232/422/485
	Number of Ports (SE1002)	2
	Connectors for External (SE1002)	RJ45
	Serial Line Protection	15 KV ESD protection for all signals
LAN Interface	Number of Ports	1
	Speed	10/100 Mbps
	Connectors for External	8-pin RJ45
	Magnetic Isolation	1.5 KV built-in protection
Serial Communication Parameters	Data Bits	5, 6, 7, 8
	Stop Bits	1, 1.5, 2
	Parity	None, Even, Odd, Space, Mark
	Flow Control	RTS/CTS and XON/XOFF
	Baud rate	50 bps to 230.4 Kbps
Serial Signals	RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
	RS-422	Tx+, Tx-, Rx+, Rx-, GND
	RS-485-4w	Tx+, Tx-, Rx+, Rx-, GND
	RS-485-2w	Data+, Data-, GND
Software	Network Protocols	HTTP, Telnet, ICMP, IP, TCP, UDP, DHCP
	Driver Support	Windows TCP Virtual Port driver, Fixed TTY driver (for SCO Unix, Linux)
	Configuration Options	Web Console, Serial Console, Telnet Console
LED Indicators	LED Indicators (SE1001)	Power, Link, 10/100M
	LED Indicators (SE1001)	100M, Link, Power, Port1, Port2
Reset Button	Reset Button	Restore to factory default by hardware
Physical Characteristics	Enclosure	1mm Aluminum with integrated wall mounts
	Weight (SE1001)	300 g

	Dimensions (SE1001)	Without ears (L x W x H): 75 x 55 x 23 mm With ears (L x W x H): 75 x 82 x 23 mm
	Weight (SE1002)	400 g
	Dimensions (SE1002)	Without ears (L x W x H): 113 x 77 x 23 mm With ears (L x W x H): 113 x 103 x 23 mm
Environmental Limits	Operating Temperature	0 to 55°C
	Operating Humidity	5 to 95% RH
Power Supply	Input Voltage	5VDC
	Interface	5mm pluggable terminal block
Approvals	Safety	EN60950-1
	EMC	CE (EN55022 Class A, EN55024), FCC Part 15 Subpart B Class A
Warranty	Warranty Period	5 years (accessories has 1 year warranty)

1.2 Product Kit:

- Serial Device Server (1 serial port)
- AC/DC Adapter optional
- 35mm Din-rail mounting kit optional
- CD

2. Hardware Introduction

2.1.1 SE1001

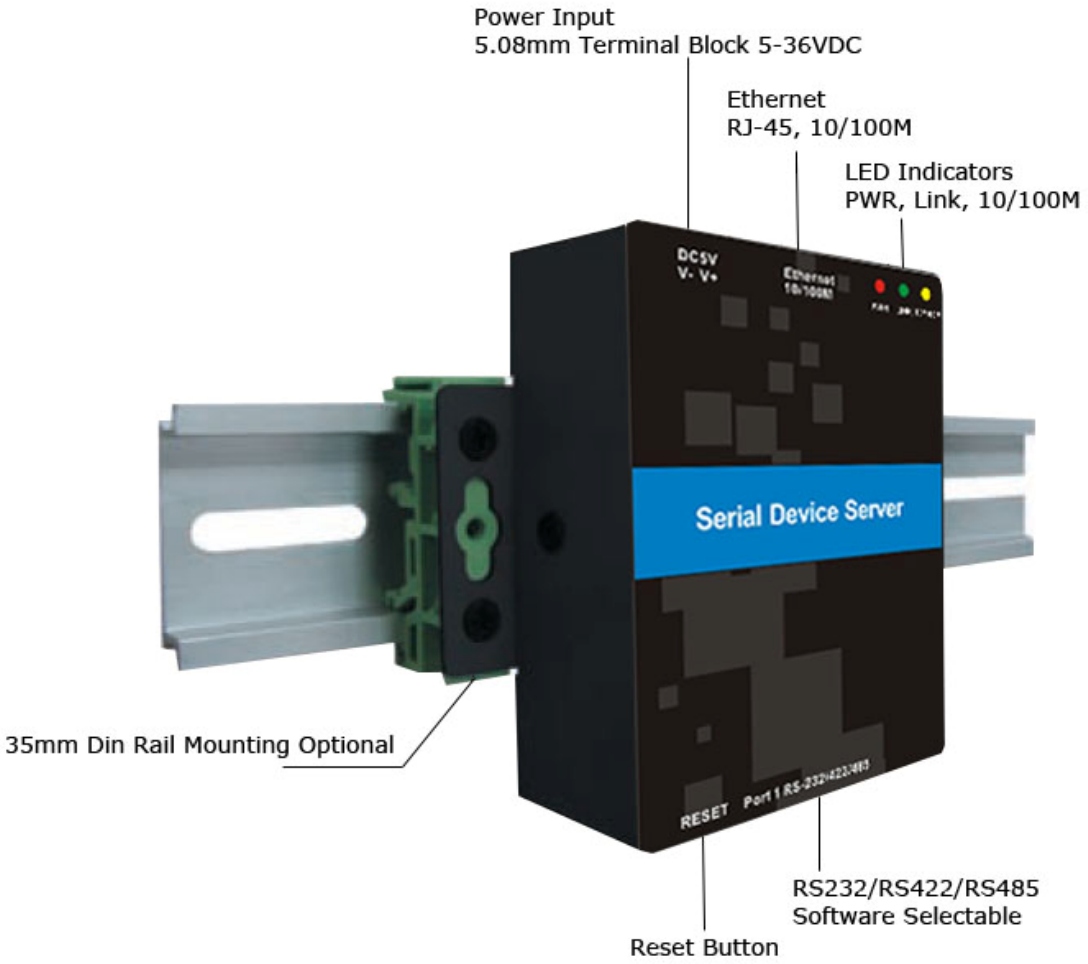


Figure 2.1 Hardware Introduction

2.1.2 Serial Port (software selectable RS232/RS422/RS485)

Before installation, please prepare serial cable according to follow pin assignment.

Pin Assignment: DB9 male connector

PIN	RS232	RS422	RS485-4w	RS422-2w
1	DCD			RTS-
2	RXD	DATA-	TXD-	TXD-
3	TXD	DATA+	TXD+	TXD+
4	DTR		RXD+	RXD+
5	GND	GND	GND	GND
6	DSR		RXD-	RXD-
7	RTS			RTS+

8	CTS			CTS+
9				CTS-

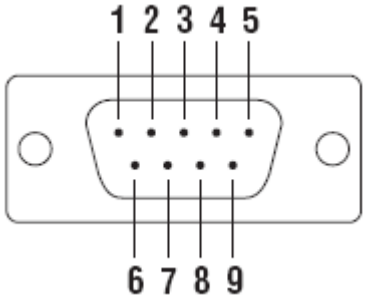


Figure 2.2 Serial Port

2.1.3 Power Supply

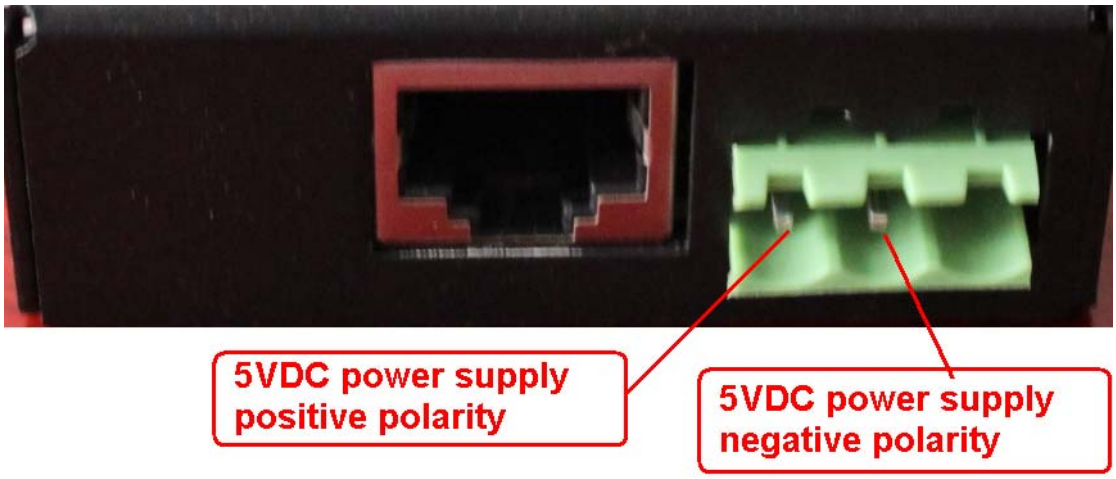


Figure 2.3 Power Supply

Notice: Please connect 5VDC power supply with SE1001 power supply terminal block.
Please take care about the polarity, do not make reverse connection.

2.1.4 LED indicator

LED Indicator	PWR	LINK	10/100M
Description	Power supply indicator (Red)	Running status indicator (Green)	Ethernet Rate (Yellow)
Off	Power off	Ethernet cable is disconnected, or has a short	10M
On	Power on	The device is connected to a Ethernet connection	100M
Blinking	N/A	Data is transmitting on Ethernet	N/A

2.2.1 SE1002

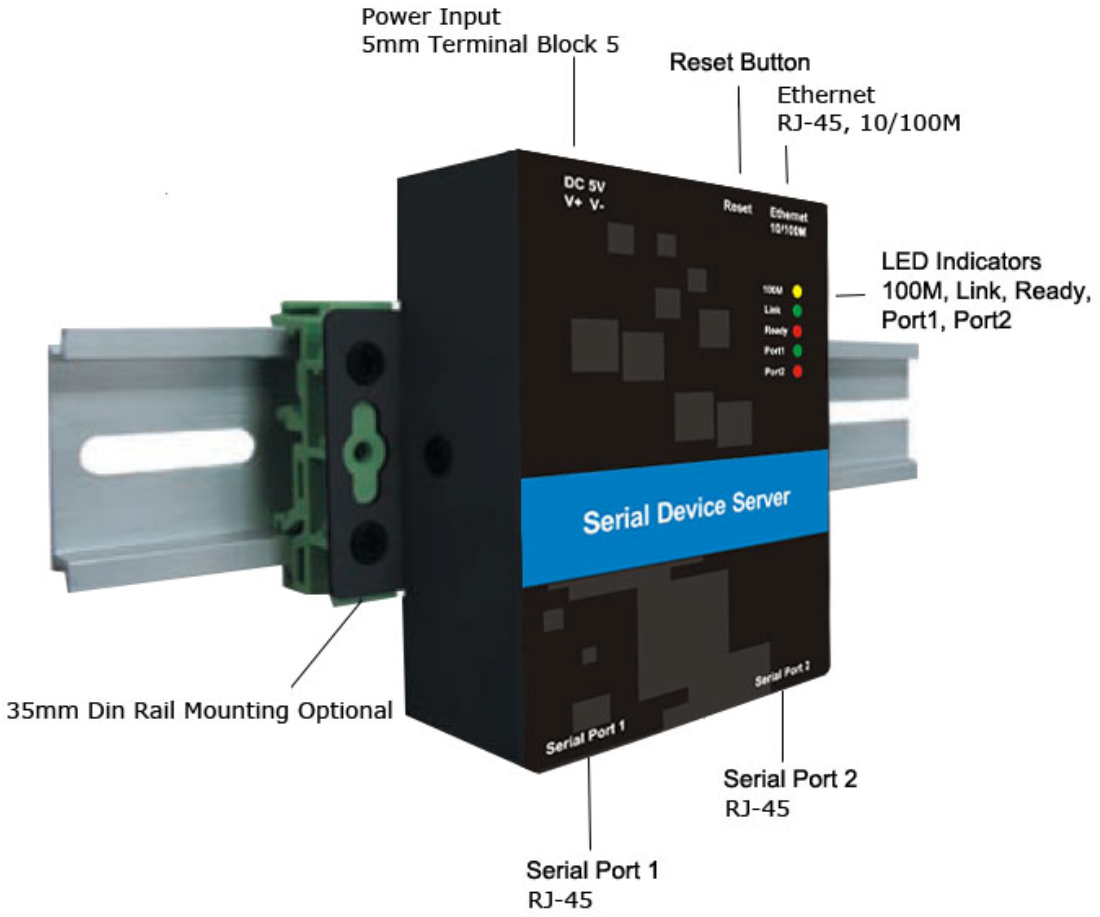


Figure 2.4 Hardware Introduction

2.2.2 Serial Port (Please refer to ordering information)

Before installation, please prepare serial cable according to follow pin assignment.

RJ45 serial connector

PIN	RS232	RS485-2w	RS485-4w	RS422
1	TXD	DATA+	TXD+	TXD+
2	RXD	DATA-	TXD-	TXD-
3	RTS		RXD+	RXD+
4	CTS		RXD-	RXD-
5	DSR			
6	GND	GND	GND	GND -
7	DTR			
8	DCD			

RJ45 RS232 to DB9/DB25 connector

RJ45		DB9 Male		DB9 Female		DB25 Male		DB25 Female	
PIN	RJ45	PIN	DB9	PIN	DB9	PIN	DB25	PIN	DB25
1	TXD	3	TXD	2	TXD	2	TXD	3	TXD
2	RXD	2	RXD	3	RXD	3	RXD	2	RXD
3	RTS	7	RTS	8	RTS	4	RTS	5	RTS
4	CTS	8	CTS	7	CTS	5	CTS	4	CTS
5	DSR	6	DSR	4	DSR	6	DSR	20	DSR
6	GND	5	GND	5	GND	7	GND	7	GND
7	DTR	4	DTR	6	DTR	20	DTR	6	DTR
8	DCD	1	DCD			8	DCD		

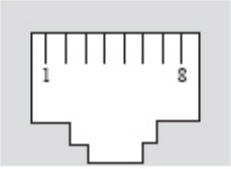


Figure 2.5 Serial Port (RJ45 connector)

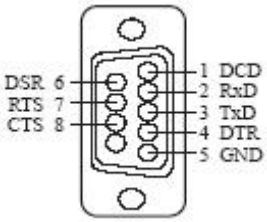


Figure 2.6 DB9 Male Connector

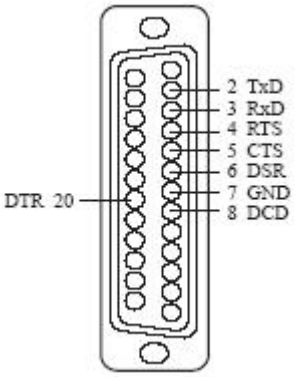
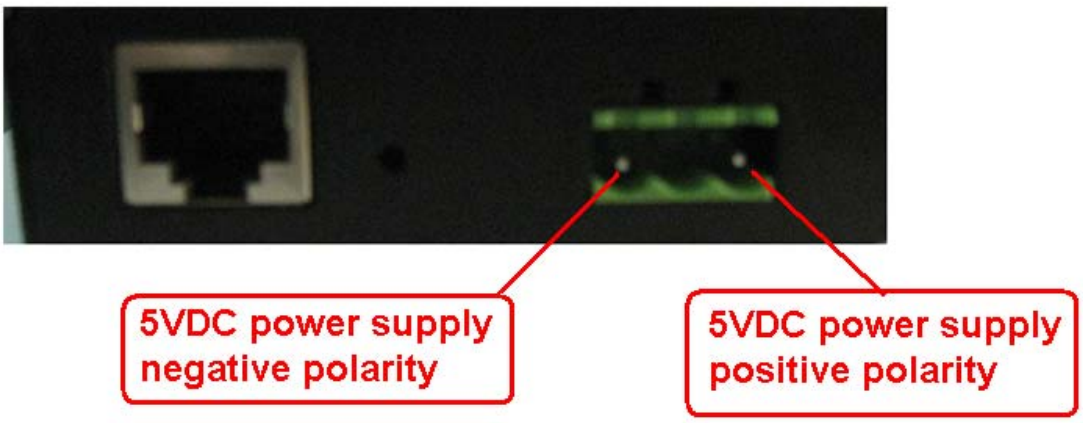


Figure 2.7 DB25 Male Connector

2.2.3 Power Supply



Notice: Please connect 5VDC power supply with SE1002 power supply terminal block.
Please take care about the polarity, do not make reverse connection.

2.2.4 LED indicator

LED Indicator	PWR	LINK	10/100M	Port1	Port2
Description	Power supply indicator (Red)	Running status indicator (Green)	Ethernet Rate (Yellow)	Serial Port 1 (Green)	Serial Port 2 (Red)
Off	Power off	Ethernet cable is disconnected, or has a short	10M	No data	No data
On	Power on	The device is connected to a Ethernet connection	100M	Data transmission	Data transmission
Blinking	N/A	Data is transmitting on Ethernet	N/A	N/A	N/A

3. Application Introduction

SE1001 works as TCP Server:

1. SE1001 connects to PLC via serial port
2. SE1001 can be configured as TCP server, has fixed IP address
3. PC can be configured as TCP client
4. TCP client in PC requests a connection from the TCP server SE1001, then PC to establish a connection with SE1001.
5. Once the connection is established between SE1001 and PC, data can be transmitted bi-directional.
6. TCP Server mode supports up to 6 simultaneous connections, so that multiple hosts can collect data from the same serial device at the same time.

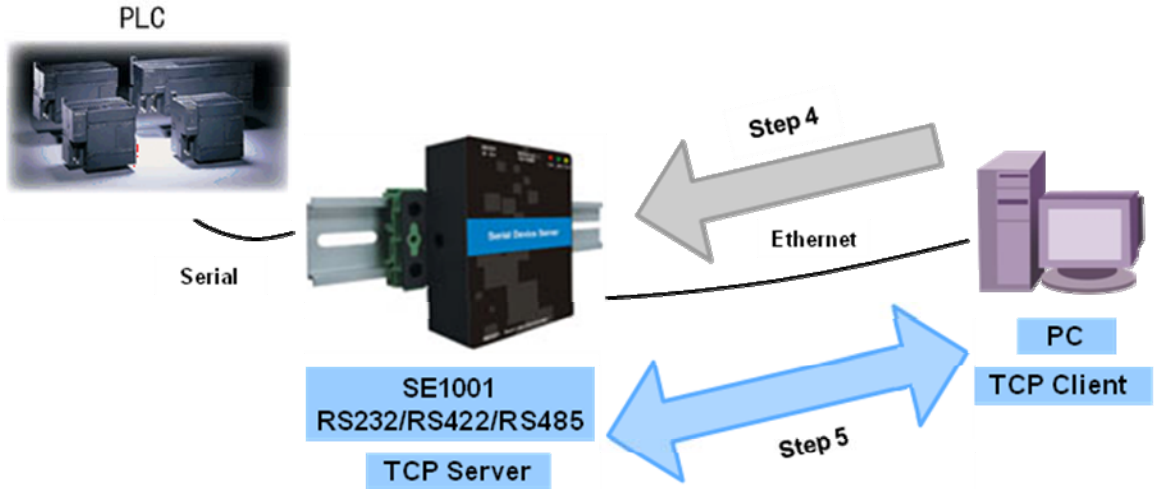


Figure 3.1: SE1001 works as TCP Server

SE1001 works as TCP Client:

1. SE1001 connects to POS via serial port
2. SE1001 can be configured as TCP client
3. Server can be configured as TCP server, , has fixed IP address
4. TCP client in SE1001 requests a connection from the TCP server, then SE1001 to establish a connection with the TCP server.
5. Once the connection is established between SE1001 and PC, data can be transmitted bi-directional.

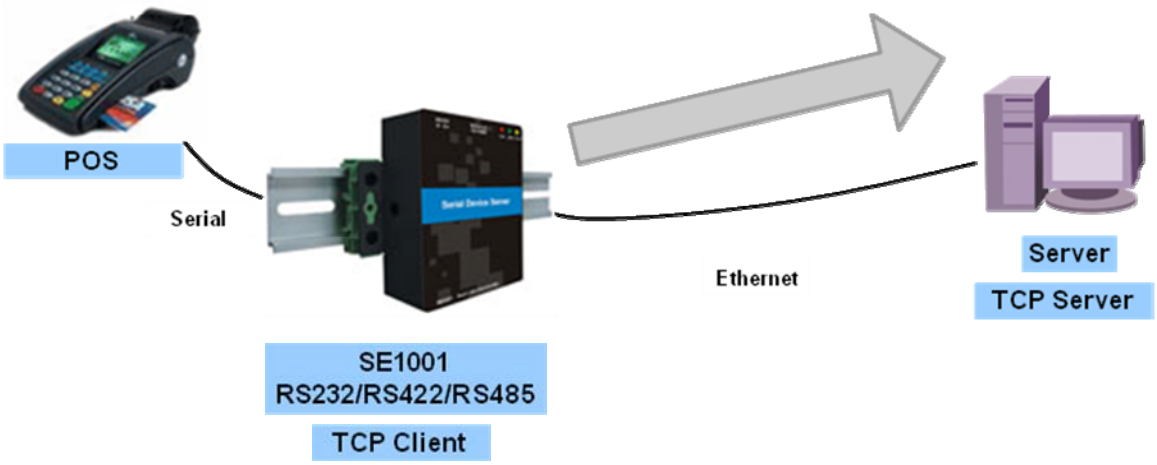


Figure 3.2: SE1001 works as TCP Client

SE1001 works as UDP mode

1. SE1001 connects to LED Displays via serial port
2. SE1001 can be configured as UDP mode
3. Compare to TCP communication, UDP is faster and more efficient, also none guaranteed (no connection requested)
4. In UDP mode, user can unicast or multicast data from Control Room to one or more LED Displays, vice verse is also true

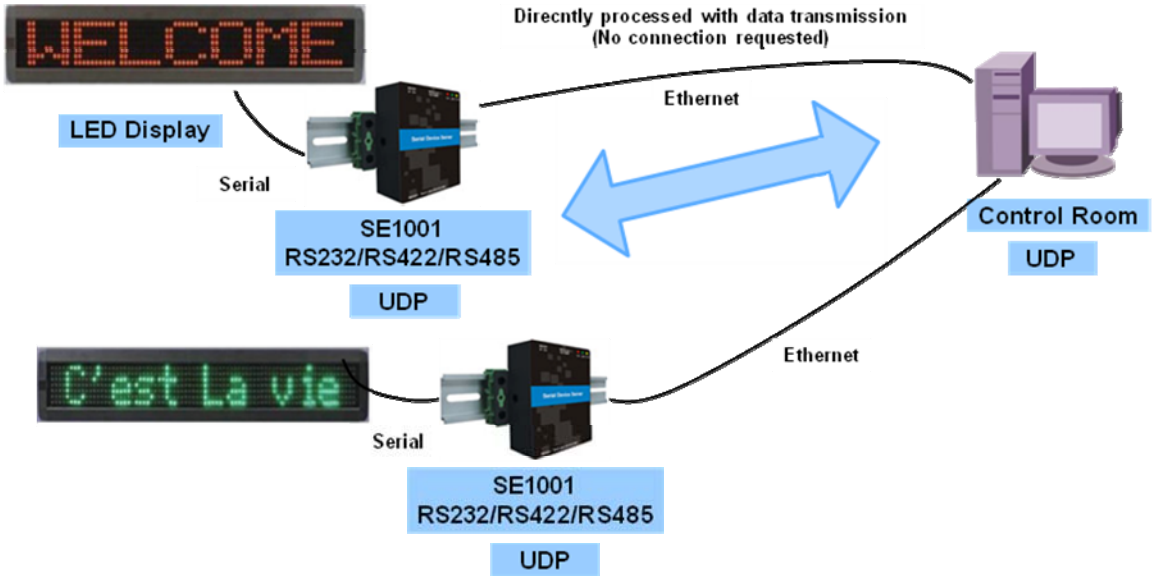


Figure 3.3: SE1001 works under UDP mode

SE1001 works under Tunneling

In the case of the serial connection is established with two or more SE1001 to

send data over TCP/IP Network .It can avoid RS-232 interface 15 meter distance limitation imposed.

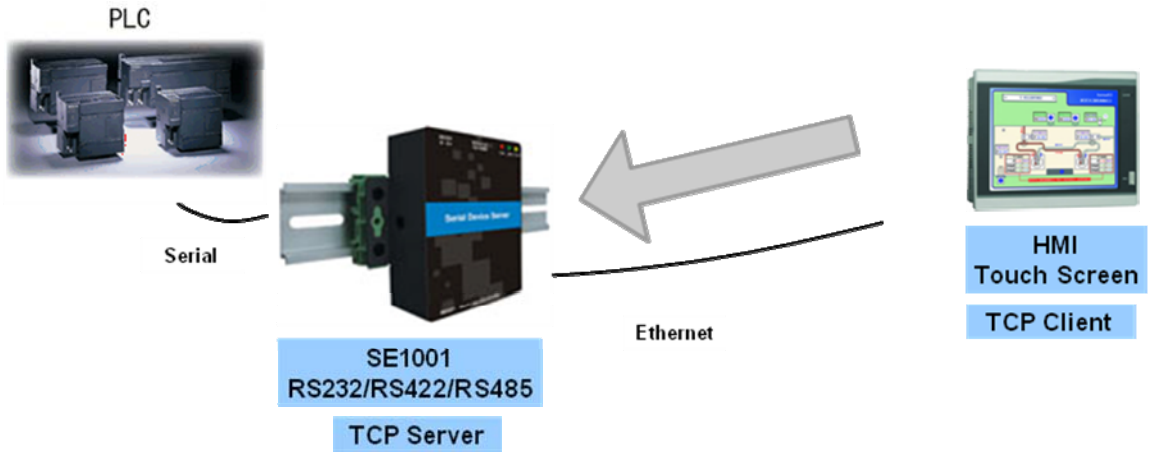


Figure 3.4: SE1001 works under tunneling mode

SE1001 works under TCP Virtual Port mode

The SE1001 comes equipped with COM drivers that work with Windows NT/2000/XP systems, and also TTY drivers for Linux systems. The driver establishes a transparent connection between host and serial device by mapping the IP: Port of the SE1001's serial port to a local COM/TTY port on the host computer. Virtual Port Mode also supports up to 6 simultaneous connections, so that multiple hosts can collect data from the same serial device at the same time.

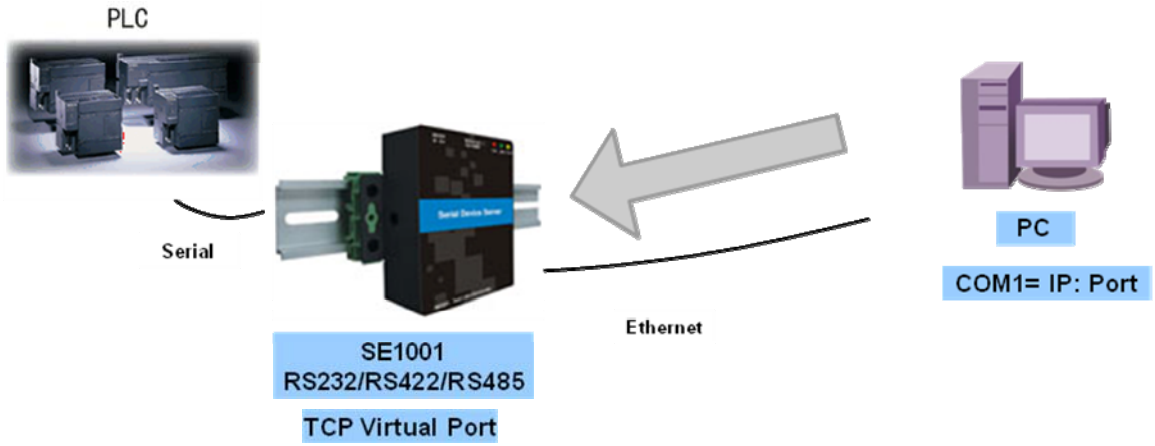
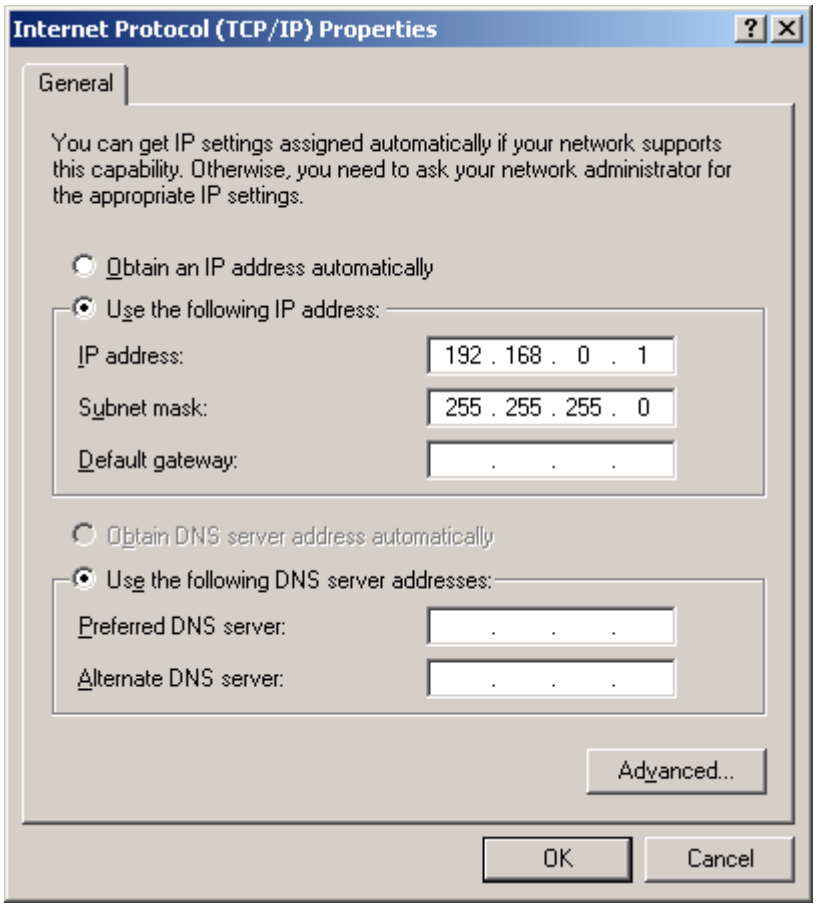


Figure 3.4: SE1001 works under TCP Virtual Port mode

4. Web Console Configuration

4.1 PC Configuration

SE1001 has default IP 192.16.0.233. Please configure your Ethernet connection as follow, then PC connects to SE1001 should set to IP address 192.168.0.x (cannot be 192.168.0.233):


Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
192 . 168 . 0 . 1
Subnet mask:
255 . 255 . 255 . 0
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

4.2 Login

SE1001 has user friendly Web Console.

Open Internet Explorer (or other web browsers), enter the IP address of SE1001 in the URL link field, e.g. **http://192.168.0.233** (- default IP of SE1001). After that, user will see follow page.

Notice: There is no login interface default, unless after user set password in the web console.

4.3 Server Menu->Server Information

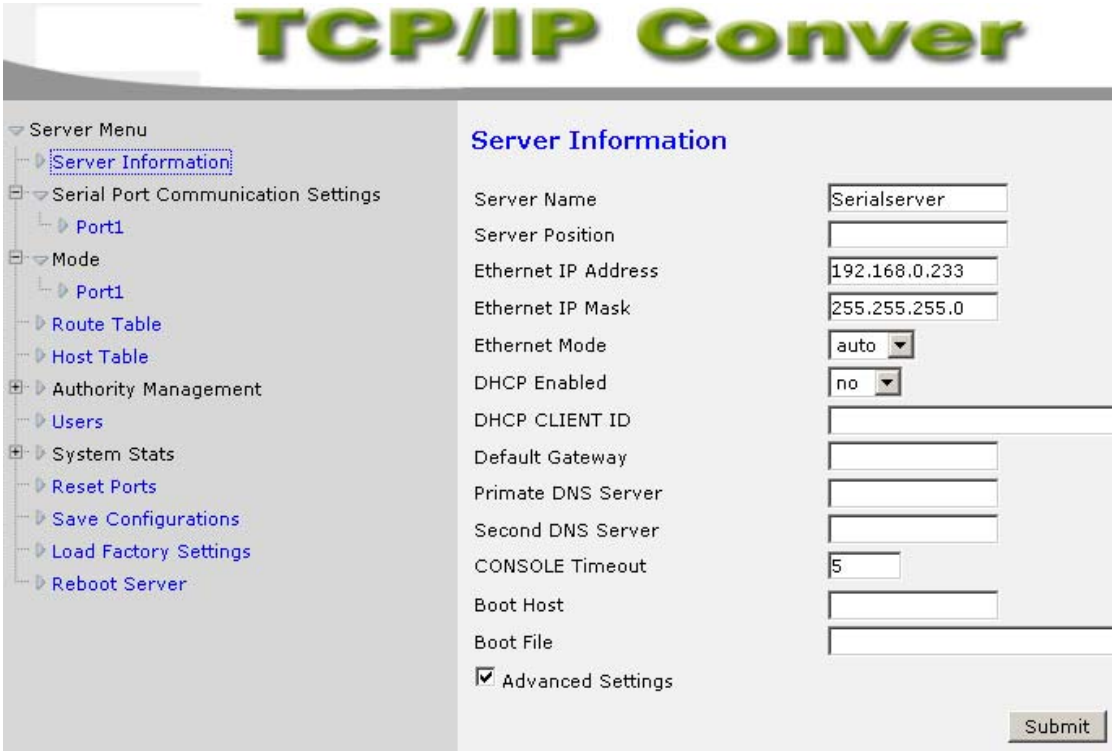


Figure: SE1001

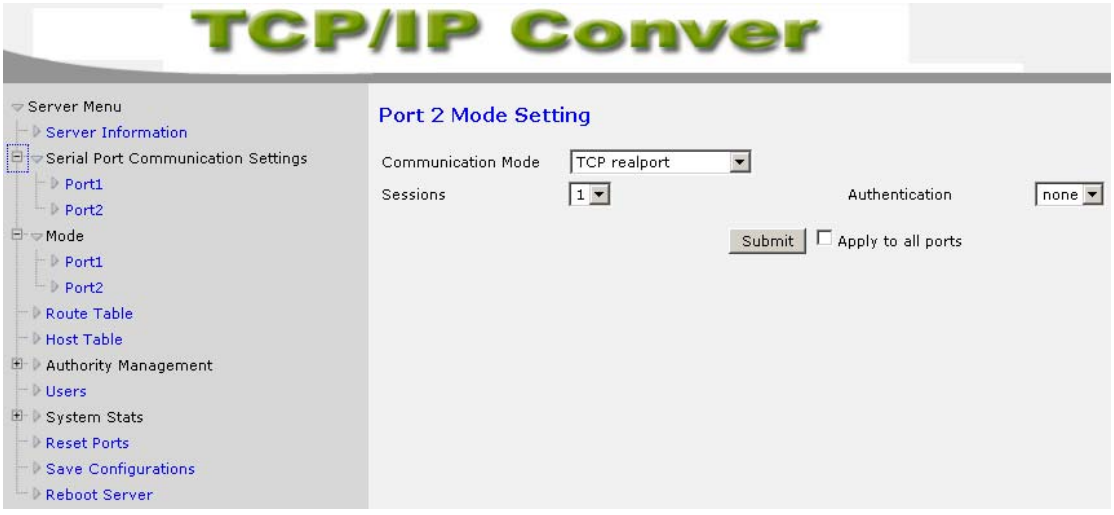
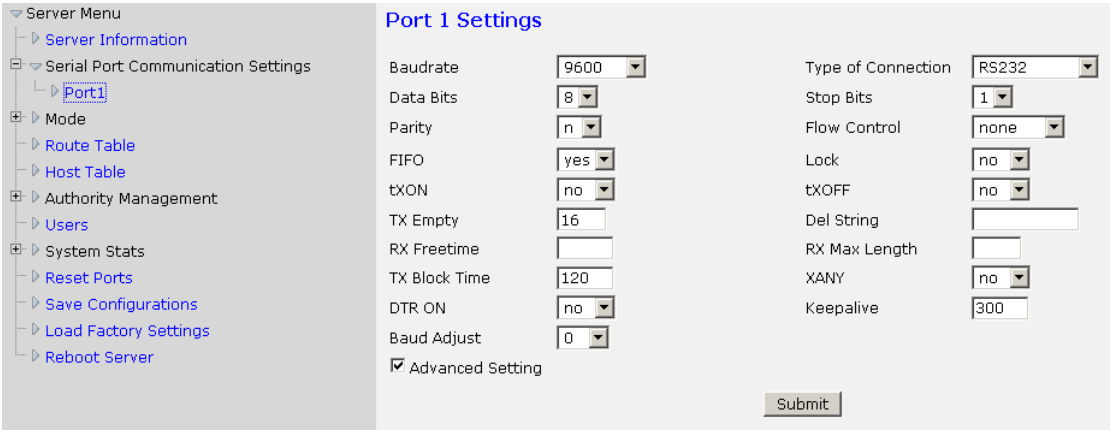


Figure: SE1002

Server Menu->Server Information		
Item	**Description**	**Default Value**
Server Name	Input the server name	
Server Position	Input the sever installation position	
Ethernet IP Address	Ethernet port IP address	192.168.0.233
Ethernet Mode	Select the Ethernet mode from “auto, 100f, 100h, 10f, 10h”	Auto

	auto-10/100M auto-negotiation 100f-100M full mode 100h-100M half mode 10f-10M full mode 10h-10M half mode	
DHCP Enabled	Enable DHCP client or disable DHCP client	No
DHCP Client ID	Input DHCP client ID	
Default Gateway	Default Gateway for Ethernet port	
Primate DNS Server	Primate DNS Server address for Ethernet port	
Second DNS Server	Second DNS Server address for Ethernet port	
Console Timeout	Set the length of login timeout	5 minutes
Advanced Settings	Boot Host and Boot File	

4.4 Serial Port Communication Settings->Port1



Serial Port Communication Settings->Port1		
Item	**Description**	**Default Value**
Baudrate	Select from “300 bps to 460.8 kbps”	9600 bps
Data Bits	Select from “5, 6, 7, 8”	8
Parity	Select from “n, o, e, s, m”	None
Stop Bits	Select from “1, 2”	1
Flow Control	Select from “none, xon/xoff, rts/cts”	None
Type of Connection	Select from “RS232, RS422, RS485_Half, RS485_Full” RS485_Half-RS485 half mode RS485_Full-RS485 full mode	RS232
Advanced Settings	**Set if necessary**	
FIFO	Select from “yes, no”. First in and first out, take effect when baud rate is large than 19200, FIFO=16 bytes	yes

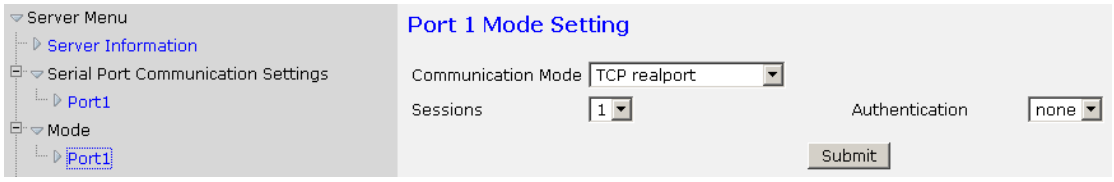
Lock	Available when working under TCP Virtual Port or TCP/UDP Socket's Telnet mode. SE1001 receives remote command for changing serial port settings from host. Select from "no, yes". no-run the command yes-do not run the command	no
tXON	Transparent XON, select from "no, yes" no-do not upload XON to network yes-upload XON to network	no
tXOFF	Transparent XOFF, select from "no, yes" no-do not upload XOFF to network yes-upload XOFF to network	no
TX Empty	SE1001 transmit data from Ethernet to serial port, software read data from Ethernet port when there is x byte in serial port Tx buffer. x is 16 as default.	16
Del String	SE1001 receive data from serial port, which matches with Del Strings, then SE1001 will package data received before matching together with data matched with Del Strings as one TCP or UDP package. When input 1-6 Hex code, 00 stands for common. Default is to leave it as blank, SE1001 will not match Del String.	
RX Freetime	When SE1001 receive data from serial port, should wait for the next byte. If the next byte is not coming in RX Freetime, SE1001 will package current data as one TCP or UDP package. The range is 1-5000 ms. SE1001 will process as default if do not set this item. Different baudrate has different default settings. When baudrate as 9600, Freetime is the time transmit 4 bytes. When baudrate is more large than 9600, Freetime is the time transmit 32 bytes. Freetime = 4x (10/baudrate) seconds	
RX Max Length	When SE1001 receive data from serial port meet maximum byte number, and then SE1001 will package the data as one TCP or UDP package. The range is 1-4096. SE1001 will process as default if do not set this item. Rx Length = max (baudrate/10, 1024)	
TX Block Time	When SE1001 stop transmit data, serial port buffer will be cleaned after TX Block Time. It is available when enable serial port flow control. The range is 0-30000 seconds. 0 stands for do not clean the data.	120
XANY	Transmit or stop transmit when serial port works at stop bits. It is only available when follow control set as	no

	"Xon/Xoff". yes-transmit any data from serial port no-only transmit data after receiving XON.	
DTR ON	Select from "no, yes". no-DTR is off yes-DTR is on	no
Keepalive	Auto detects data availability in serial port in Keepalive time. If there is no data in serial port for Keepalive time, then reset the serial port.	120
Baud Adjust	Adjust baudrate when it is less than 19200. -1-decrease 5% 0-do not change it 1-increase 5%	0
Note	Only 1 item is available from "RX Freetime, RX Max Length, TX Block Time". There would be error when calculating RX Freetime, RX Max Length.	

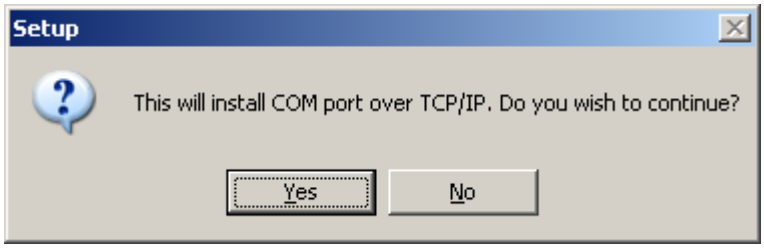
4.5 Mode->Port1

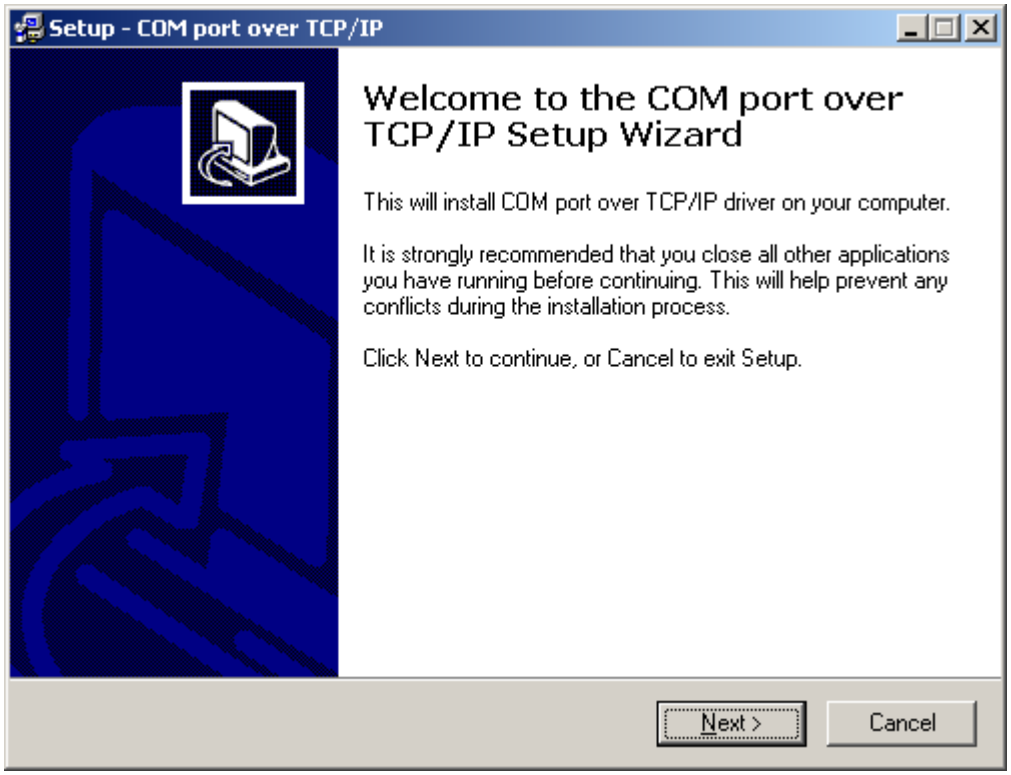
Mode->Port1		
Item	**Description**	**Default Value**
Communication Mode	Select from "TCP Virtual Port, UDP Virtual Port, TCP/UDP socket, Multi screens TTY, PPP dialout, PPP daemon, Line printer daemon, MCP, Simple UDP"	TCP Virtual Port
Sessions	TCP simultaneous connections, select from "1 to 6"	1
Authentication	Select from "none, local"	None

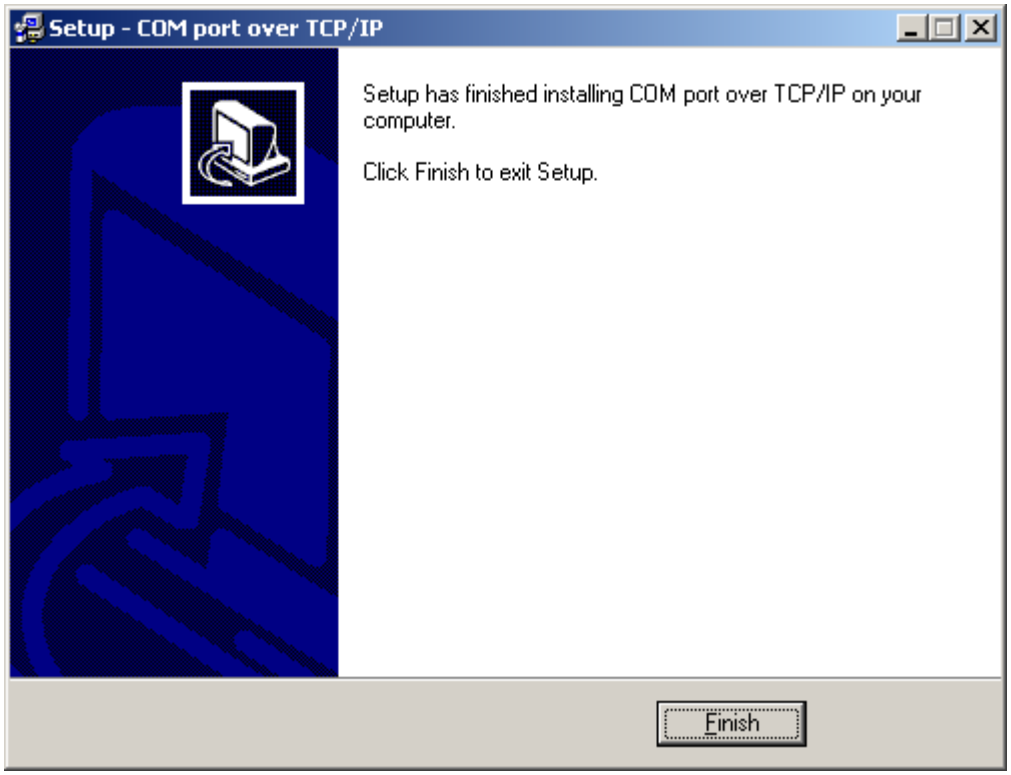
TCP Virtualport

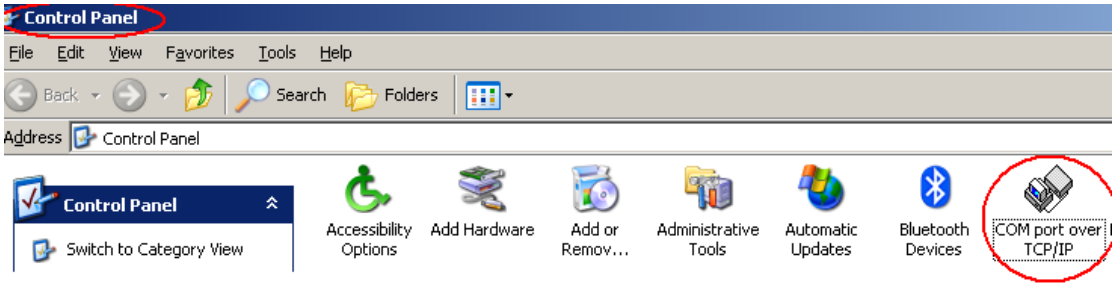


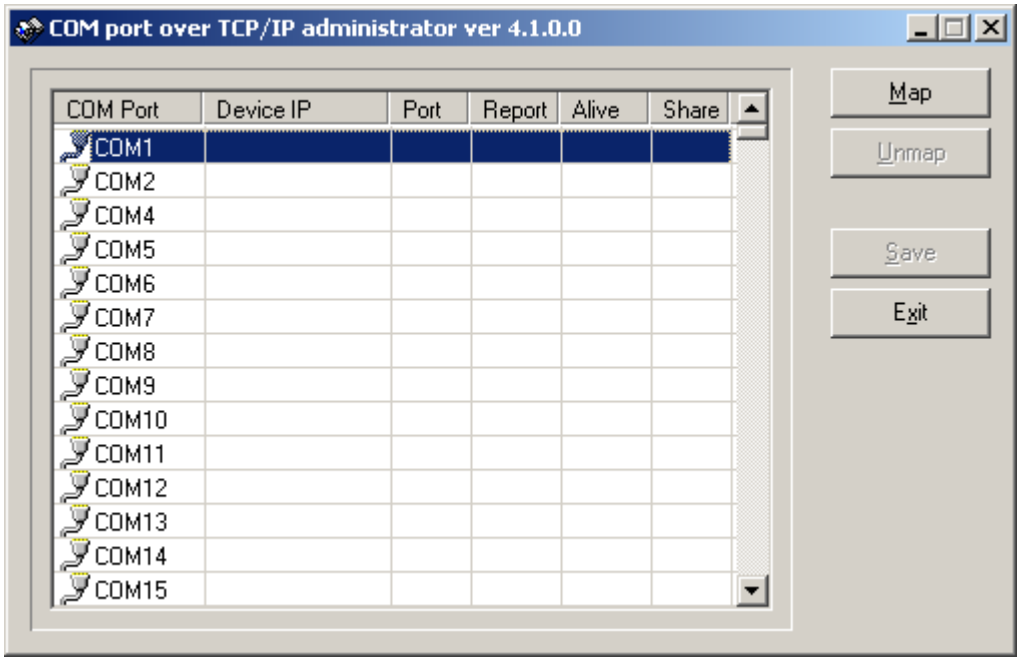
Please install "Real Port" software before using TCP and UDP Realport.



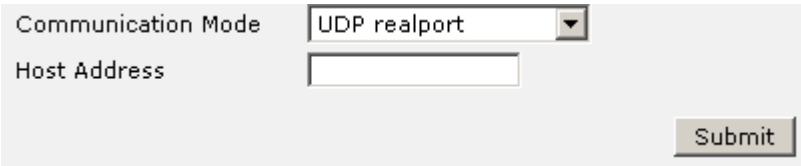

Setup - COM port over TCP/IP
Welcome to the COM port over TCP/IP Setup Wizard
This will install COM port over TCP/IP driver on your computer.
It is strongly recommended that you close all other applications you have running before continuing. This will help prevent any conflicts during the installation process.
Click Next to continue, or Cancel to exit Setup.
Next >
Cancel


Setup - COM port over TCP/IP
Setup has finished installing COM port over TCP/IP on your computer.
Click Finish to exit Setup.
Finish

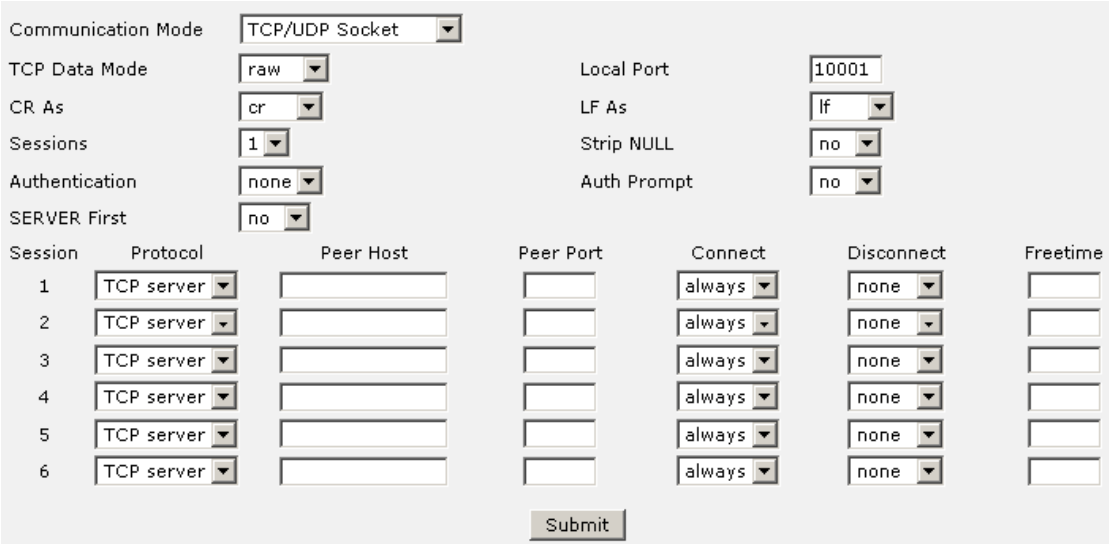




UDP Realport



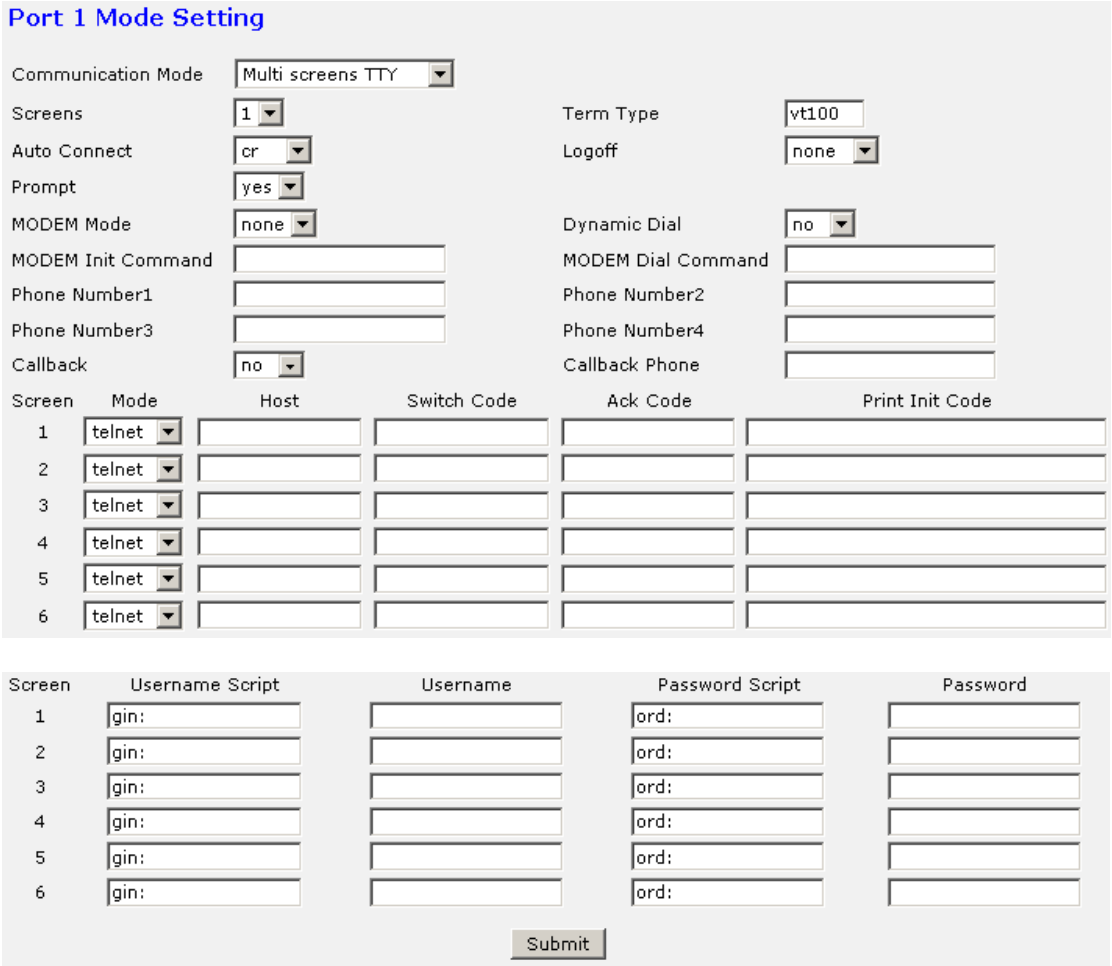
TCP / UDP Socket



Mode->Port1->TCP/UDP Socket		
Item	**Description**	**Default Value**
TCP Data Mode	Select from “raw, telnet” raw-serial port data transparent transmission telnet-serial port data transmitted under Telnet/RF2217 format	raw
Local Port (available in TCP server mode, UDP mode)	TCP server port which allows remote TCP client connection	10001
CR As	Select from “none, cr, lf, cr-lf” none-when receiving “Enter” from serial port, do not send to Ethernet port cr- when receiving “Enter” from serial port, send to Ethernet port lf- when receiving “Enter” from serial port, send “Line Feed” to Ethernet port cr-lf-when receiving “Enter” from serial port, send “Enter” and “Line Feed” to Ethernet port	cr
LF As	Select from “none, cr, lf, cr-lf” none-when receiving “Line Feed” from serial port, do not send to Ethernet port cr- when receiving “Line Feed” from serial port, send to Ethernet port lf- when receiving “Line Feed” from serial port, send “Enter” to Ethernet port cr-lf-when receiving “Line Feed” from serial port, send “Enter” and “Line Feed” to Ethernet port	lf
Sessions	TCP simultaneous connections, select from “1 to 6”	1
Strip NULL		
Authentication	Select from “none, local”	None

(available in TCP server mode)	none-no authentication when TCP client start connecting to TCP server local-require authentication when TCP client start connection to TCP server, user should also set authentication information in “Users” page	
Auth Prompt (available in TCP server mode)	Select from “no, yes” no-no login popup when TCP client connecting to TCP server yes-has login popup including user and password when TCP client connecting to TCP server	
SERVER First		
Protocol	Select from “TCP client, TCP server, UDP” TCP client-SE1001 works under TCP client mode, requests connection from TCP server TCP server-SE1001 works under TCP server mode, waiting for TCP client connection UDP-SE1001 works under UDP mode, works as both client and server	
Peer Host (available in TCP client mode, UDP mode)	Remote host IP address	
Peer Port (available in TCP client mode, UDP mode)	Remote host port	
Connect (available in TCP client mode)	Select from “always, char, dcdon, dsron” always-start TCP connection to remote host after power on char-start TCP connection to remote host when receiving data from serial port dcdon-start TCP connection to remote host when DCD signal level is high dsron-start TCP connection to remote host when DSR signal level is high	always
Disconnect (available in TCP client mode)	Select from “none, dcdoff, dsroff, break” none-do not stop TCP connection to remote host any time dcdoff-stop TCP connection to remote host when DCD signal level coming from high to low dsroff- stop TCP connection to remote host when DSR signal level coming from high to low break-stop TCP connection to remote host when receiving “break”	none
Freetime (available in TCP client mode)	Set from “0 to 10000 seconds” Auto disconnect in Freetime when there is no data transmission	

Multi Screens TTY



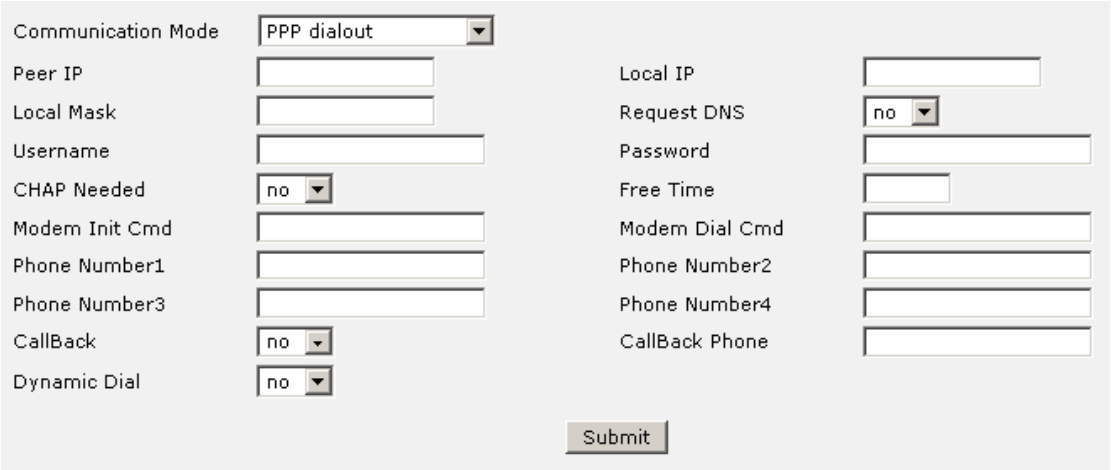
Mode->Port1->Multi Screens TTY		
Item	**Description**	**Default Value**
Screens	Supported screen number, select from “1 to 6”	1
Term Type	Terminal emulation type	Vt100
Auto Connect	Select from “cr, auto” cr-after terminal input “Enter”, then SE1001 connects to host auto-terminal auto connects to host after power on	cr
Logoff	Extra log off way besides standard log off, select from “none, dcdoff, dsroff, break” none-no extra log off way dcdoff-log off when DCD signal level coming from high to low dsroff-log off when DSR signal level coming from high to low break-log off when pressing Ctrl+Break	none
Prompt	Display connection status on terminal when SE1001 connecting to Unix, select from “yes, no” yes-display no-do not display	yes

Modem Mode	After connecting modem to SE1001 serial port, Terminal could remote dial in, dial out and call back. Select from “none, in, out” none-modem control unavailable in-modem is waiting for dial in out-modem dials out using phone number	None
Dynamic Dial	Select from “no, yes” no-when modem works under dial out mode, it only dials out using Phone Number1 yes-when modem works under dial out mode, it first dial out using Phone Number1, if failed, then try Phone Number2, Phone Number3, Phone Number4 until successful	no
Modem Init Command	Initial command for dial in and dial out. Usually it is “ats0=1&c1&d2” for dial in and “ats0=0&c1&d2” for dial out	
Modem Dial Command		
Phone Number1	Dial out Phone Number1	
Phone Number2	Dial out Phone Number2	
Phone Number3	Dial out Phone Number3	
Phone Number4	Dial out Phone Number4	
Callback		
Callback Phone		
Mode	Working mode for connecting to terminal, select from “telnet, rtelnet” telnet-no need driver for Unix, available for any Unix supports TCP/IP. After input “Username” and “Password”, it supports auto log in host. Should also input host item rtelnet-require driver for Unix. Fixed_TTL is available when log in Unix. Host, Username, Password are unavailable in this mode Currently supports drivers for SCO Unix and Linux	
Host		
Switch Code	Available when “Screens” is more than 1. There are 2 ways to save screen history information, save in Terminal or save in SE1001. Save in Terminal is available when terminal supports this function, and provide command to switch screen. Save in SE1001 is available no matter terminal supports save in terminal function or not. User could switch screen by pressing hot key on terminal, it could be ASCII or Hex. Select from “terminal, server” terminal-save in terminal server-save in SE1001	

Ask Code	Available when work under “terminal” mode. SE1001 provides some famous manufacturer’s code, user can select after pressing “Ctrl+L”, including Newstar, Greatwall, Newland	
Print Init Code		
Username Script		
Password		
Password Script		
Password		

Please install TTY driver for Linux/Unix before using “Multi screens TTY”.

PPP Dialout

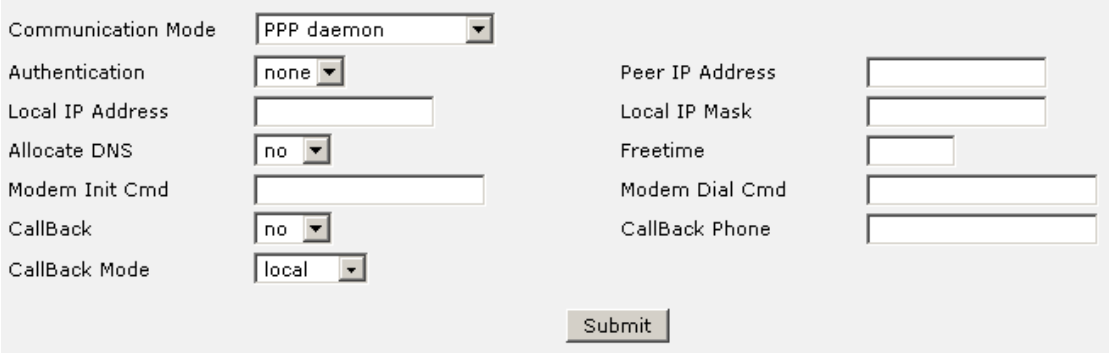


In this mode, SE1001 works as a PPP client, dial out to PPP server.

Mode->Port1->PPP dialout		
Item	**Description**	**Default Value**
Peer IP	Remote server IP. If leave it blank, can also get from remote PPP server after negotiation.	
Local IP	Local PPP client IP. If leave it blank, can also get from remote PPP server.	
Local Mask	Mask address	
Request DNS	Request DNS from remote PPP server. Select from “no, yes”	no
Username	Username for PPP server access.	
Password	Password for PPP server access.	
CHAP Needed	CHAP authentication, select from “no, yes”	no
Free Time	Auto disconnect after Free Time. Type from “0-10000” minutes, 0 stand for always online.	
Modem Init Cmd	Modem initial command for dial out. Usually it is “at”.	
Modem Dial	Modem dial out via Tone or Pulse.	

Cmd	If it is Tone, then input “atdt”, if it is Pulse, then input “atdp”, most of the time it is Tone.	
Phone Number1	Dial out number 1. Modem will dial out from number 1 to number 4 until successful.	
Phone Number2	Dial out number 2. Modem will dial out from number 1 to number 4 until successful.	
Phone Number3	Dial out number 3. Modem will dial out from number 1 to number 4 until successful.	
Phone Number4	Dial out number 4. Modem will dial out from number 1 to number 4 until successful.	
CallBack		no
CallBack Phone		no
Dymanic Dial		no

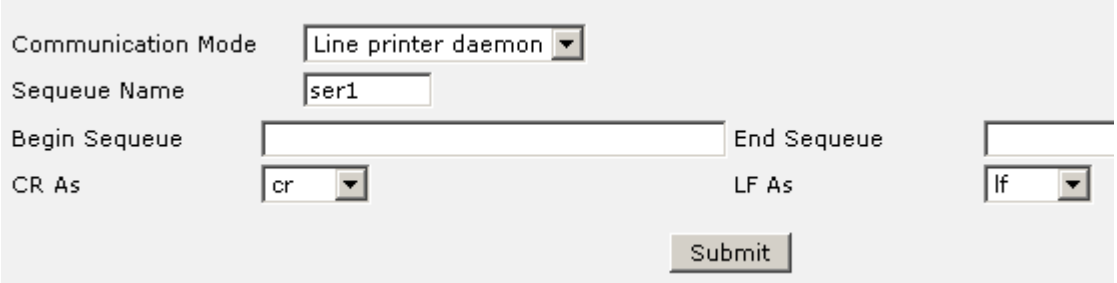
PPP Daemon



In this mode, SE1001 works as a PPP server, waiting for PPP client dial in.

Mode->Port1->PPP Daemon		
Item	**Description**	**Default Value**
Authentication	Select from “none, pap, chap”	
Peer IP	Remote client IP assigned by server.	
Local IP	Local PPP server IP.	
Local Mask	Mask address	
Allocate DNS	Allocate DNS IP to client. Select from “no, yes”	no
CHAP Needed	CHAP authentication, select from “no, yes”	no
Free Time	Auto disconnect after Free Time. Type from “0-10000” minutes, 0 stand for always online.	
Modem Init Cmd	Modem initial command for dial out. Usually it is “ats0=1”, which is modem automatically response.	
Modem Dial Cmd	Modem dial in via Tone or Pulse. If it is Tone, then input “atdt”, if it is Pulse, then input “atdp”, most of the time it is Tone.	
CallBack		no
CallBack Phone		no
Dymanic Dial		no

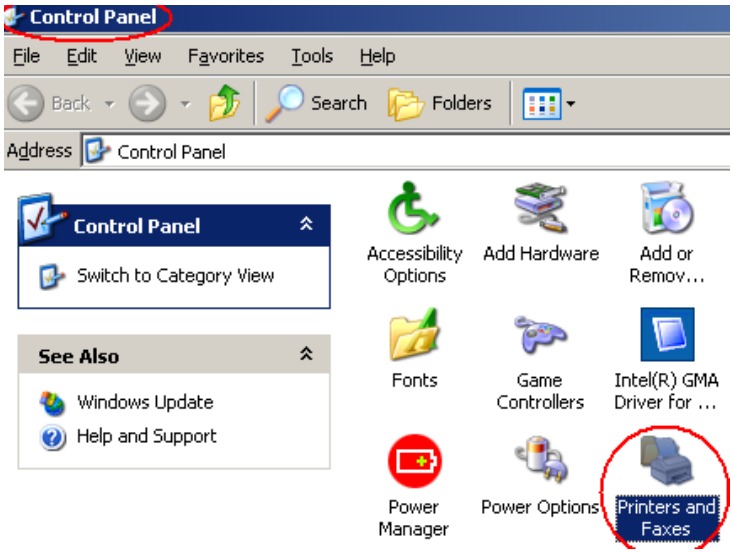
Line Printer Daemon

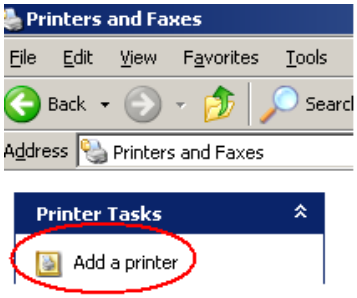


SE1001 supports part of the serial port printer (part of Rack series), work as printer server.

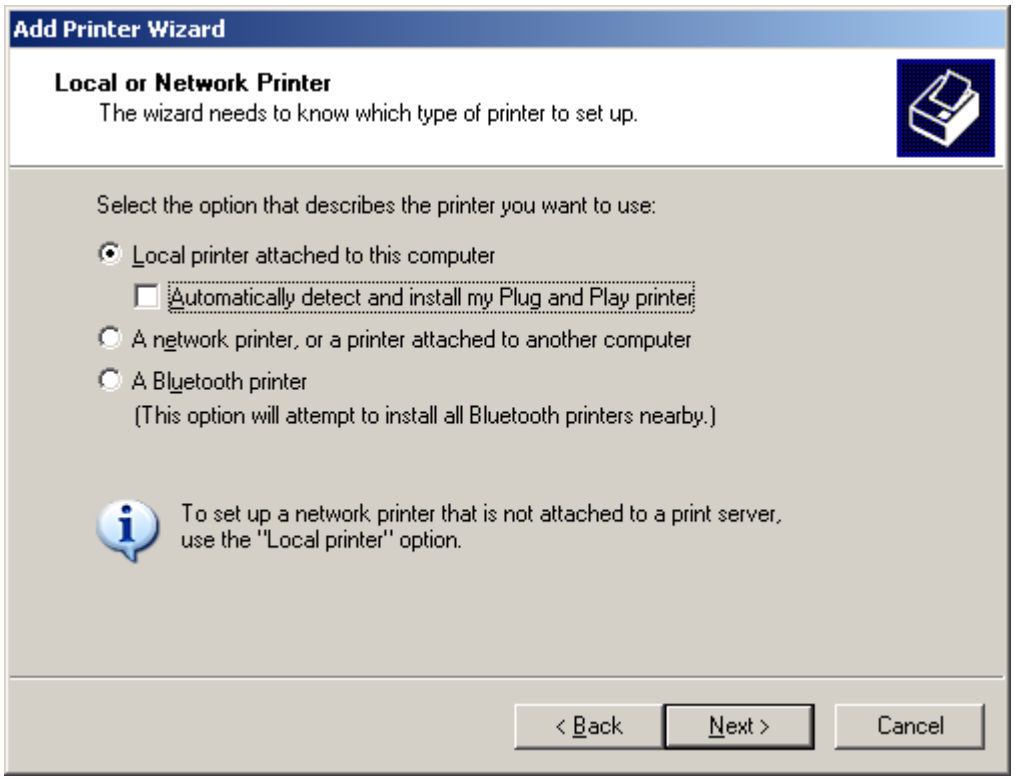
Mode->Port1->Line printer daemon		
Item	**Description**	**Default Value**
Sequeue Name	Print sequeue name	Ser1
Begin Sequeue	Before printing, SE1001 sends Sequeue to printer for printer initiation.	
End Sequeue	After printing, SE1001 sends Sequeue to printer.	
CR As	Select from “none, cr, lf, cr-lf” none-when receiving “Enter” from serial port, do not send to Ethernet port cr- when receiving “Enter” from serial port, send to Ethernet port lf- when receiving “Enter” from serial port, send “Line Feed” to Ethernet port cr-lf-when receiving “Enter” from serial port, send “Enter” and “Line Feed” to Ethernet port	cf
LF As	Select from “none, cr, lf, cr-lf” none-when receiving “Line Feed” from serial port, do not send to Ethernet port cr- when receiving “Line Feed” from serial port, send to Ethernet port lf- when receiving “Line Feed” from serial port, send “Enter” to Ethernet port cr-lf-when receiving “Line Feed” from serial port, send “Enter” and “Line Feed” to Ethernet port	lf

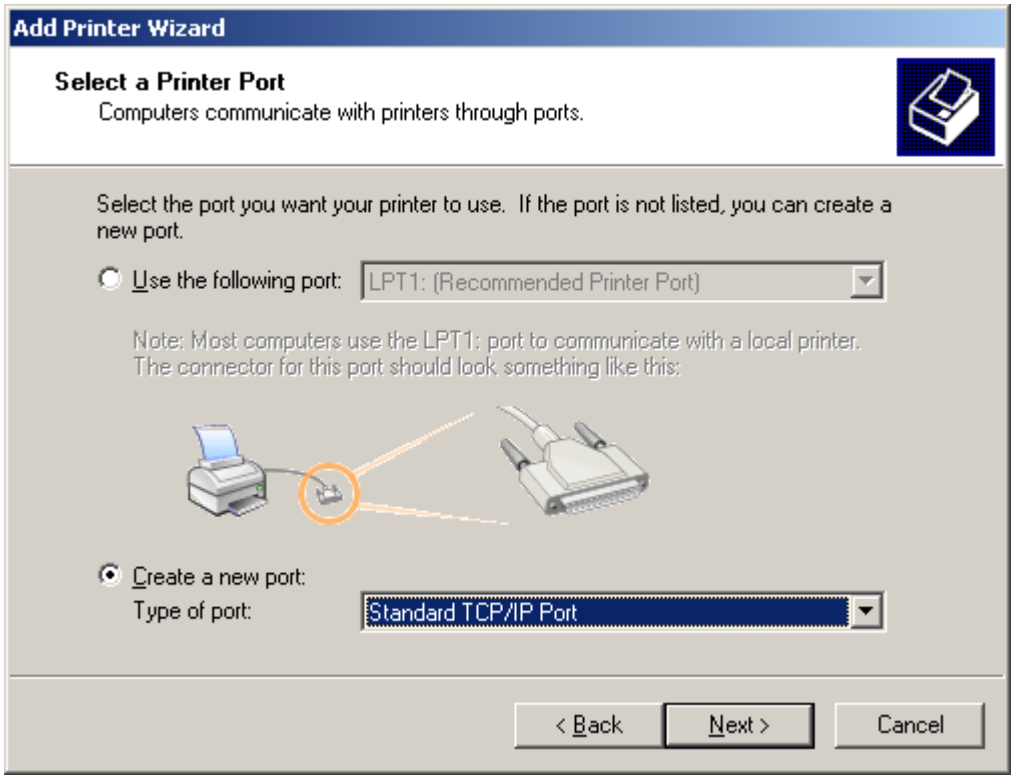
Install printer in Windows:


Control Panel
File Edit View Favorites Tools Help
Back Search Folders
Address Control Panel
Control Panel
Switch to Category View
See Also
Windows Update
Help and Support
Accessibility Options
Add Hardware
Add or Remov...
Fonts
Game Controllers
Intel(R) GMA Driver for ...
Power Manager
Power Options
Printers and Faxes

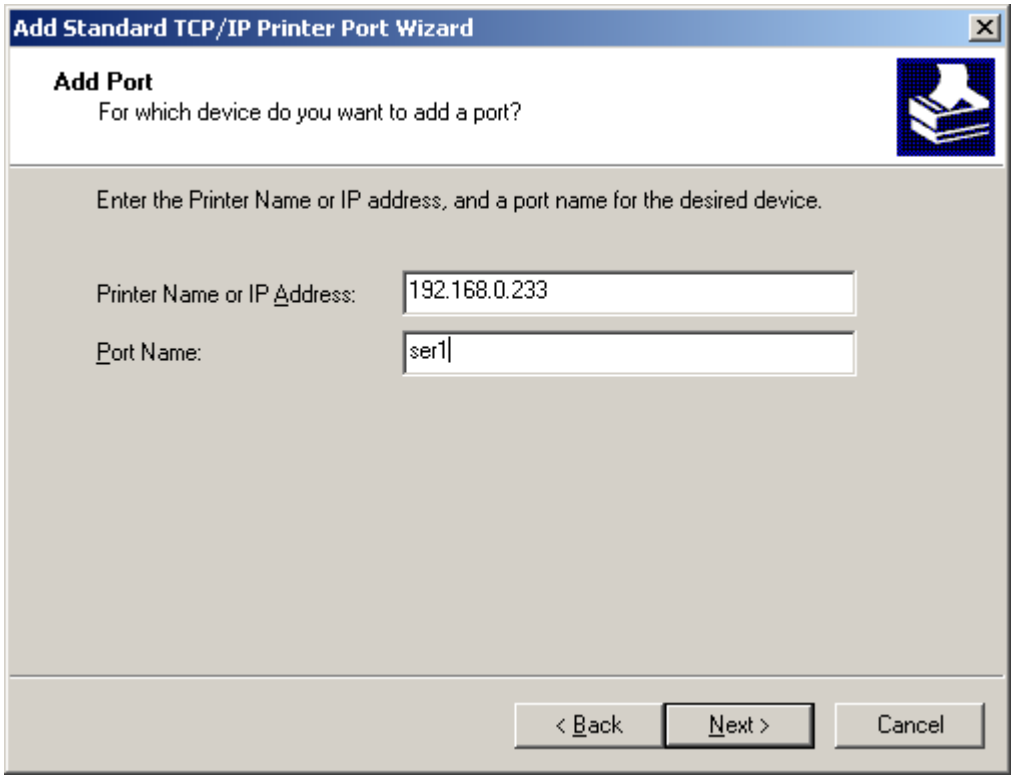

Printers and Faxes
File Edit View Favorites Tools
Back Search
Address Printers and Faxes
Printer Tasks
Add a printer

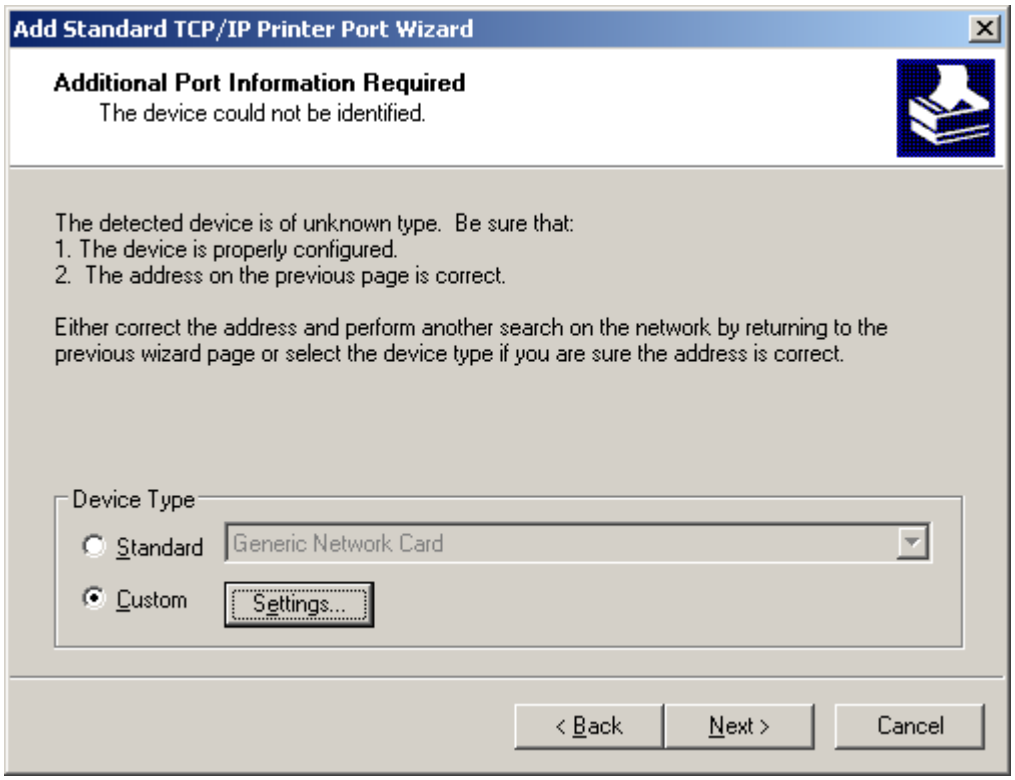
Add Printer Wizard
Welcome to the Add Printer Wizard
This wizard helps you install a printer or make printer connections.
If you have a Plug and Play printer that connects through a USB port (or any other hot pluggable port, such as IEEE 1394, infrared, and so on), you do not need to use this wizard. Click Cancel to close the wizard, and then plug the printer's cable into your computer or point the printer toward your computer's infrared port, and turn the printer on. Windows will automatically install the printer for you.
To continue, click Next.
< Back
Next >
Cancel


Add Printer Wizard
Local or Network Printer
The wizard needs to know which type of printer to set up.
Select the option that describes the printer you want to use:
Local printer attached to this computer
Automatically detect and install my Plug and Play printer
A network printer, or a printer attached to another computer
A Bluetooth printer
(This option will attempt to install all Bluetooth printers nearby.)
To set up a network printer that is not attached to a print server, use the "Local printer" option.
< Back
Next >
Cancel

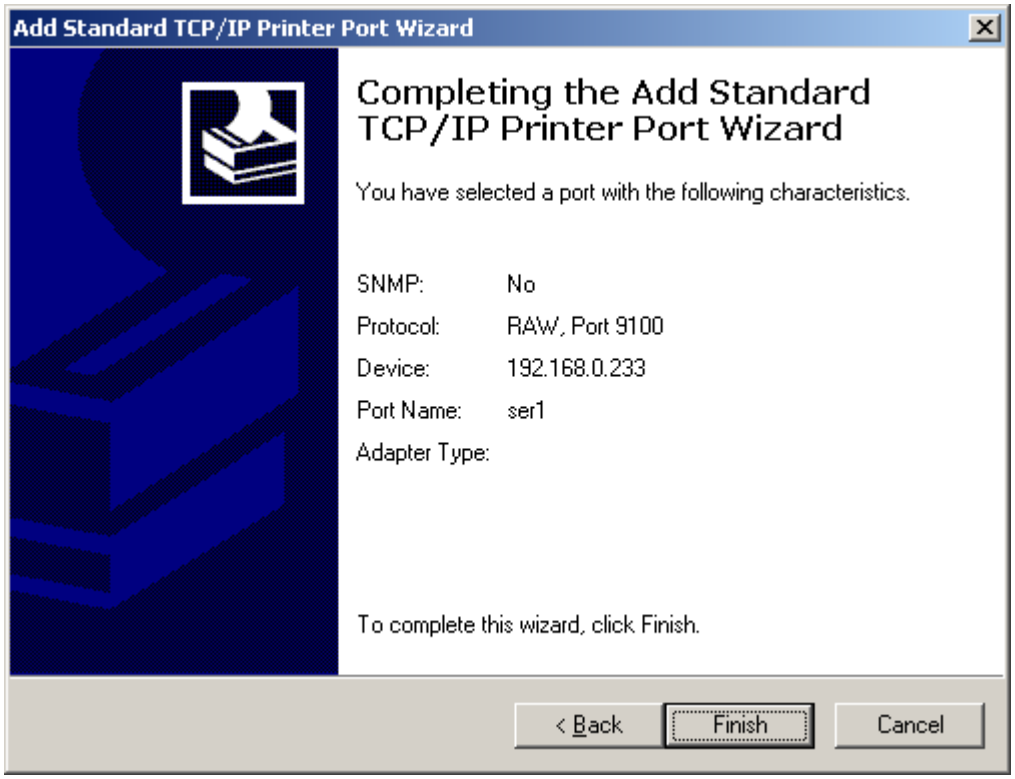

Add Printer Wizard
Select a Printer Port
Computers communicate with printers through ports.
Select the port you want your printer to use. If the port is not listed, you can create a new port.
Use the following port:
LPT1: (Recommended Printer Port)
Note: Most computers use the LPT1: port to communicate with a local printer. The connector for this port should look something like this:
Create a new port:
Type of port:
Standard TCP/IP Port
< Back
Next >
Cancel

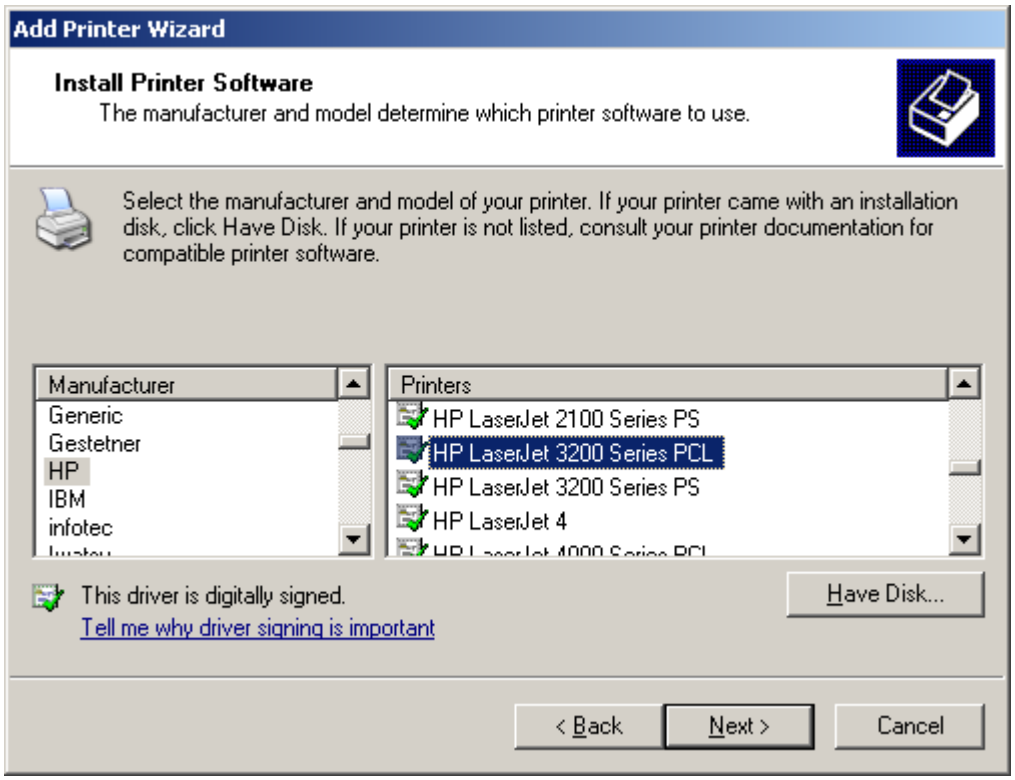
Add Standard TCP/IP Printer Port Wizard
Welcome to the Add Standard TCP/IP Printer Port Wizard
You use this wizard to add a port for a network printer.
Before continuing be sure that:
1. The device is turned on.
2. The network is connected and configured.
To continue, click Next.
< Back
Next >
Cancel


Add Standard TCP/IP Printer Port Wizard
Add Port
For which device do you want to add a port?
Enter the Printer Name or IP address, and a port name for the desired device.
Printer Name or IP Address:
192.168.0.233
Port Name:
ser1
< Back
Next >
Cancel

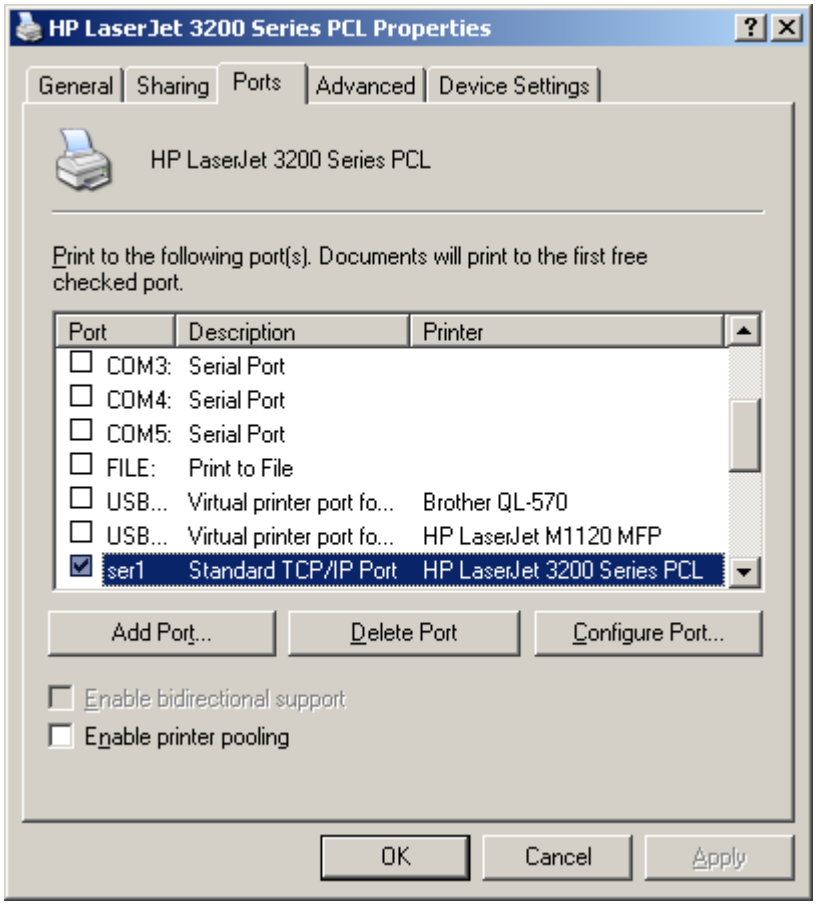

Add Standard TCP/IP Printer Port Wizard
Additional Port Information Required
The device could not be identified.
The detected device is of unknown type. Be sure that:
1. The device is properly configured.
2. The address on the previous page is correct.
Either correct the address and perform another search on the network by returning to the previous wizard page or select the device type if you are sure the address is correct.
Device Type
Standard
Generic Network Card
Custom
Settings...
< Back
Next >
Cancel

Leave it as default settings.




Add Printer Wizard
Install Printer Software
The manufacturer and model determine which printer software to use.
Select the manufacturer and model of your printer. If your printer came with an installation disk, click Have Disk. If your printer is not listed, consult your printer documentation for compatible printer software.
Manufacturer
Generic
Gestetner
HP
IBM
infotec
Printers
HP LaserJet 2100 Series PS
HP LaserJet 3200 Series PCL
HP LaserJet 3200 Series PS
HP LaserJet 4
This driver is digitally signed.
Tell me why driver signing is important
Have Disk...
< Back
Next >
Cancel

Select the correct printer.



Install Printer in Unix:

There are two ways: run mkdev rlp or run mkdev lp.

Here SE1001 IP is 24.0.46.144 and Printer name is lp1

A. mkdev rlp

Remote printing configuration

Do you want to install or remove remote printing (i/r/q)? [q]:r

Select r to delete original one

Do you want to remove /usr/spool/lpd? (y/n) [n] y

Do you want to remove /etc/printcap? (y/n) [n] y

And run mkdev rlp again

Remote printing configuration

Do you want to install or remove remote printing (i/r/q)? [q]: i

Select I to start installation

Installing Remote Line Printing

Creating directories /usr/lpd/local and /usr/spool/lpd and file /etc/printcap.

Saving lp, cancel, lpmove and lpstat commands to /usr/lpd/local

Installing remote lp, cancel, lpmove and lpstat commands

Do you wish to change the printer description file /etc/printcap? (y/n) [n] y

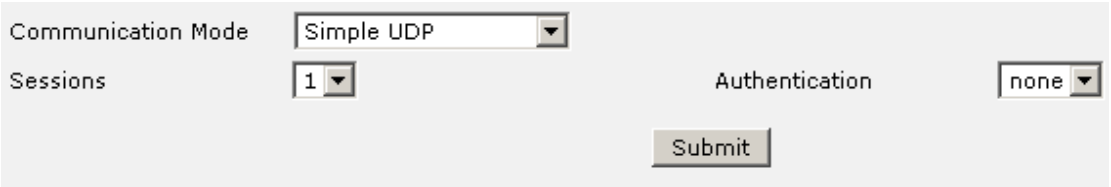
Select y

Remote Printing Configuration
Enter information for remote printers or local printers accepting
remote printing requests
Please enter the printer name (q to quit): lp1
Input printer name: lp1
Is lp1 a remote printer or a local printer (r/l)? r
Input r, which is remote install printer
Please enter the the name of the remote host that lp1 is attached to: 24.0.46.144
Input SE1001 IP: 24.0.46.144
Printer lp1 is connected to host 24.0.46.144
Is this correct? (y/n) y
Confirm SE1001 IP, input y
If '24.0.46.144' currently runs SCO OpenServer Release 5 or above, it can support the extended remote line printer protocol.
Do you want to turn on the "extended RLP protocol" support flag.
If you're not sure, answer 'n'? (y/n) [n]
Input n
Would you like this to be the system default printer? (y/n) [n]
Input n
Make sure your host name appears in 24.0.46.144's /etc/hosts.equiv or /etc/hosts.lpd file
Make sure that lp1 appears in 24.0.46.144's /etc/printcap file (BSD format)
Make sure that lp1 has a spool directory on 24.0.46.144
Please hit <return> to continue
Press Enter
Putting lp1 in printer description file and creating spool dir...done
Updating LP information...done
Remote Printing Configuration
Enter information for remote printers or local printers accepting
remote printing requests
Please enter the printer name (q to quit): q
If there is another printer on other serial port, please input the sequeue again. Else input q and finish installation.

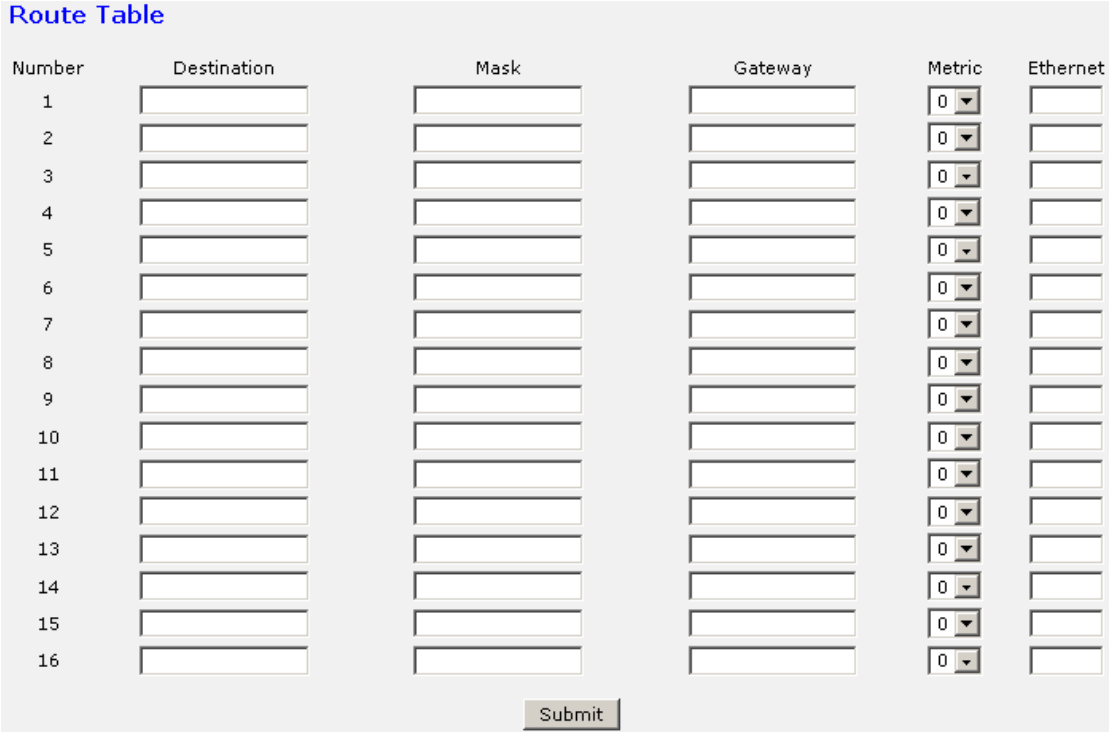
B. mkdev lp
After login, please select Printer - Add Remote - UNIX
Please input SE1001's IP 24.0.46.144 in Host, and input lp1 in Printer.

MCP

Simple UDP



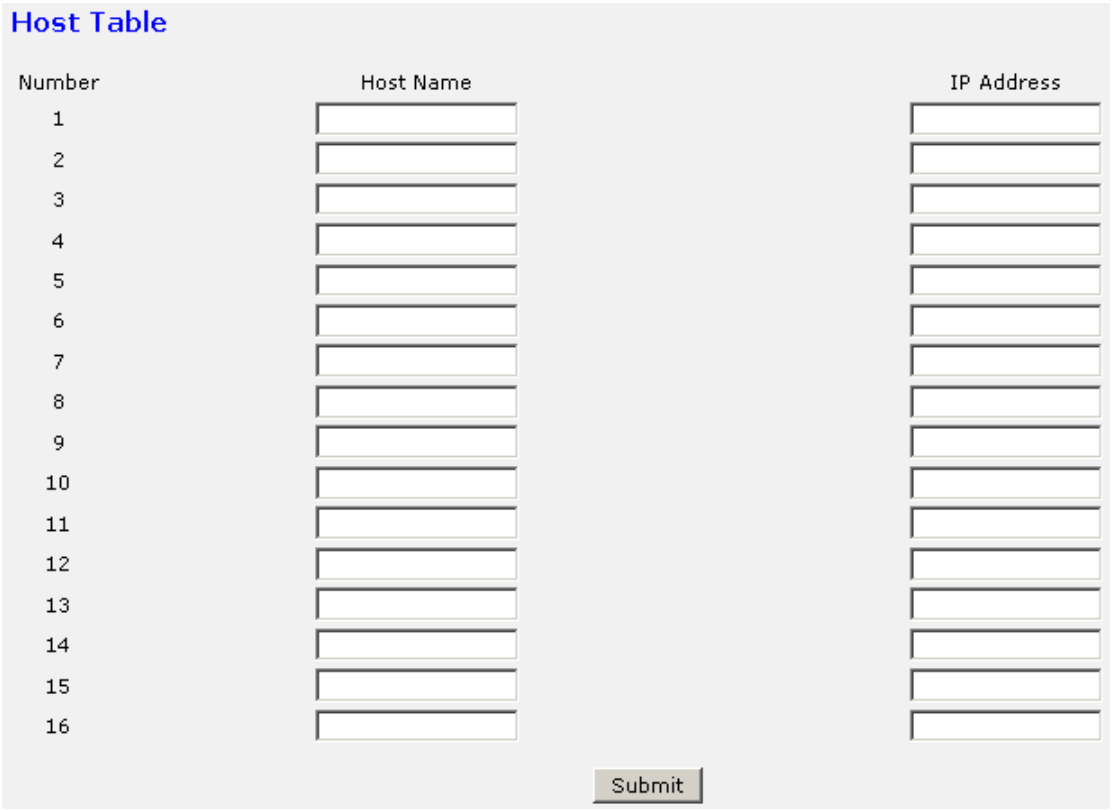
4.6 Route Table



Route Table		
Item	**Description**	**Default Value**
Destination	Destination IP address	
Mask	Destination IP Mask	
Gateway	Gateway IP Address	
Metric	Hop count, Select from “0, 1”, 0 is directly connection	0
Ethernet	Leave it as default	

Support maximum 16 route table.

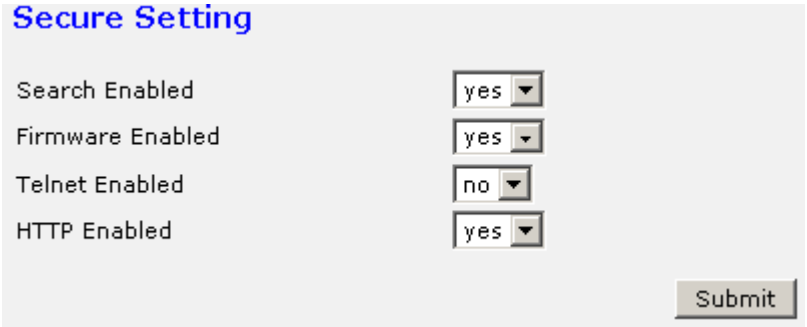
4.7 Host Table



Host Table		
Item	**Description**	**Default Value**
Host Name	Destination IP address	
IP Address	Destination IP Mask	

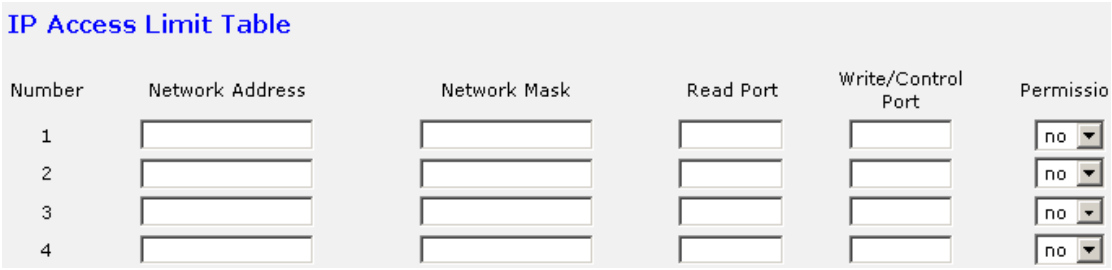
Support maximum 16 host table.

4.8.1 Authority Management->Secure Setting



Secure Setting		
Item	**Description**	**Default Value**
Search Enabled	Enable search SE1001 via utility tool	Yes
Firmware Enabled	Enable upgrade firmware	Yes
Telnet Enabled	Enable login via Telnet	Yes
HTTP Enabled	Enable login via HTTP	yes

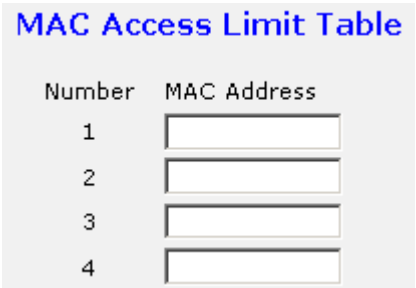
4.8.2 Authority Management->IP Address Access



IP Access Limit Table		
Item	**Description**	**Default Value**
Network Address	IP address which has right to access to SE1001, default has no limitation	
Network Mask		
Read Port	Read only permission for the selected serial port, can be selected after input “Ctrl+L”	
Write/Control Port		
Permission		no

Support maximum 32 tables.

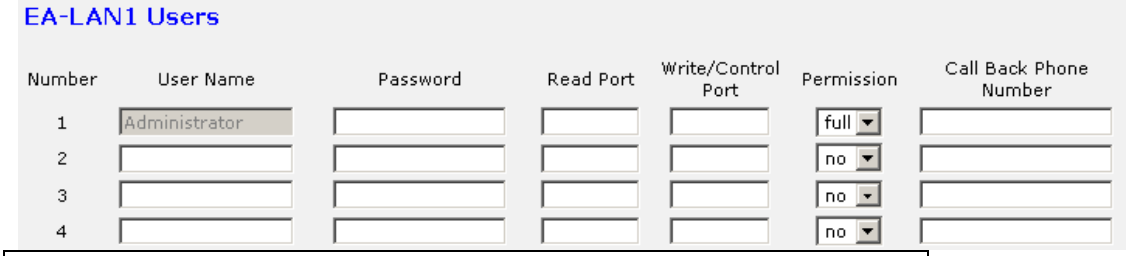
4.8.3 Authority Management->MAC Address Access



MAC Access Limit Table		
Item	**Description**	**Default Value**
MAC Address	MAC address which has right to access to SE1001, default has no limitation	

Support maximum 32 tables.

4.9 Users



IP Access Limit Table		
Item	**Description**	**Default Value**
User Name	User name for login	

Password	Password for login	
Read Port		
Write/Control Port		
Permission		
Call Back Phone Number		

Support maximum 64 users.

4.10.1 System Stats->System Information

System Information

System
Firmware version : 4.3T40
MAC address : 10-0E-45-00-C6-13
Ethernet count : 1, serial port count : 1
Memory size is 2097152 byte, free memory size is 358464 byte
Dedicated console : NO
LPT port : NO
Total packets 277, free packets 277.
System time : 6056

4.10.2 System Stats->Network Interface Information

Network Interface Information

Name	IP Address	Mask	TX Packets	RX Packets	TX Length	RX Length
eth1	192.168.0.233	255.255.255.0	497	896	216678	104585

4.10.3 System Stats->Active Routing Information

Active Routing Information

Destination Address	Mask	Gateway	Metric	Interface
127.0.0.0	255.0.0.0	127.0.0.1	0	lo1
192.168.0.233	255.255.255.255	127.0.0.1	0	lo1
192.168.0.0	255.255.255.0	192.168.0.233	0	eth1

4.10.4 System Stats->Serial Port Communication Information

Serial Port Information

Port	Settings	Flow	TX Length	RX Length	DTR	RTS	DSR	CTS	DCD	RI
1	9600-8-N-1	n	0	0	0	0	0	0	0	0

4.10.5 System Stats->ARP Address Map Information

ARP Address Map Information

Interface	IP Address	Hardware Address	State	Type	TTL
eth1	192.168.0.1	00-16-D3-31-8E-7A	RESOLVED	DYNAMIC	241

4.10.6 System Stats->TCP Socket Information

TCP Socket Information

Local Address/Port	Remote Address/Port	State	RX Length	TX Length
0.0.0.0/23	0.0.0.0/0	LISTEN	0	0
0.0.0.0/961	0.0.0.0/0	LISTEN	0	0

4.10.7 System Stats->Active TCP Socket Information

Active TCP Socket Information

Local Address/Port	Remote Address/Port	State	RX Length	TX Length

4.10.8 System Stats->UDP Information

UDP Socket Information

Local Address/Port	Remote Address/Port	RX Length	TX Length

4.11 Reset Ports

Select ports to reset

☐ Port1

Check All | Submit

4.12 Save Configurations

To save the current settings, please click the save button.

Note: If the server IP address has been changed, the new address will be activated after the save button is clicked. Please reload the web page using the new IP address.

Save

4.13 Load Factory Settings

To load the factory default settings, please click the load button.

Note: After loading the factory settings, the IP address will change to 192.168.0.233. After clicking the load button, please reload the web page using this IP address.

Load

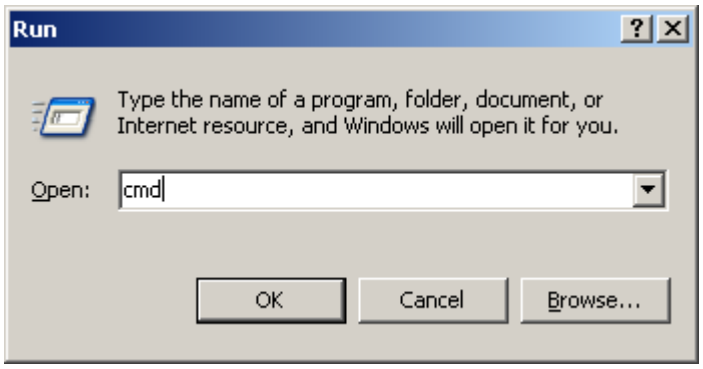
4.14 Reboot Server

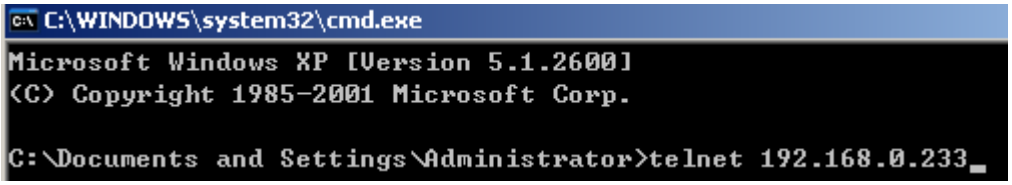
To reboot the server now, please click the reboot button

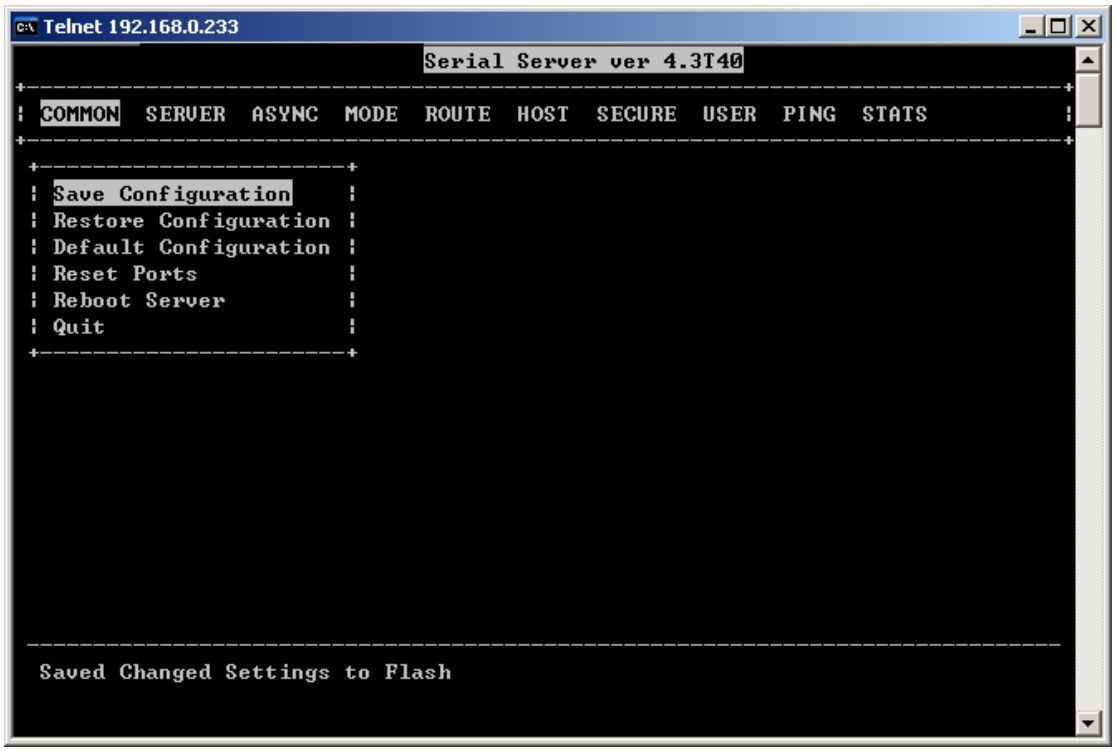
Reboot

5. Telnet Configuration

Open command window. (Click “Start” => “Run”, enter “cmd” in the pop-up dialog box to have DOS window opened.) Enter “telnet 192.168.0.233” (i.e. to connect to SE1001 when its IP is 192.168.0.233).



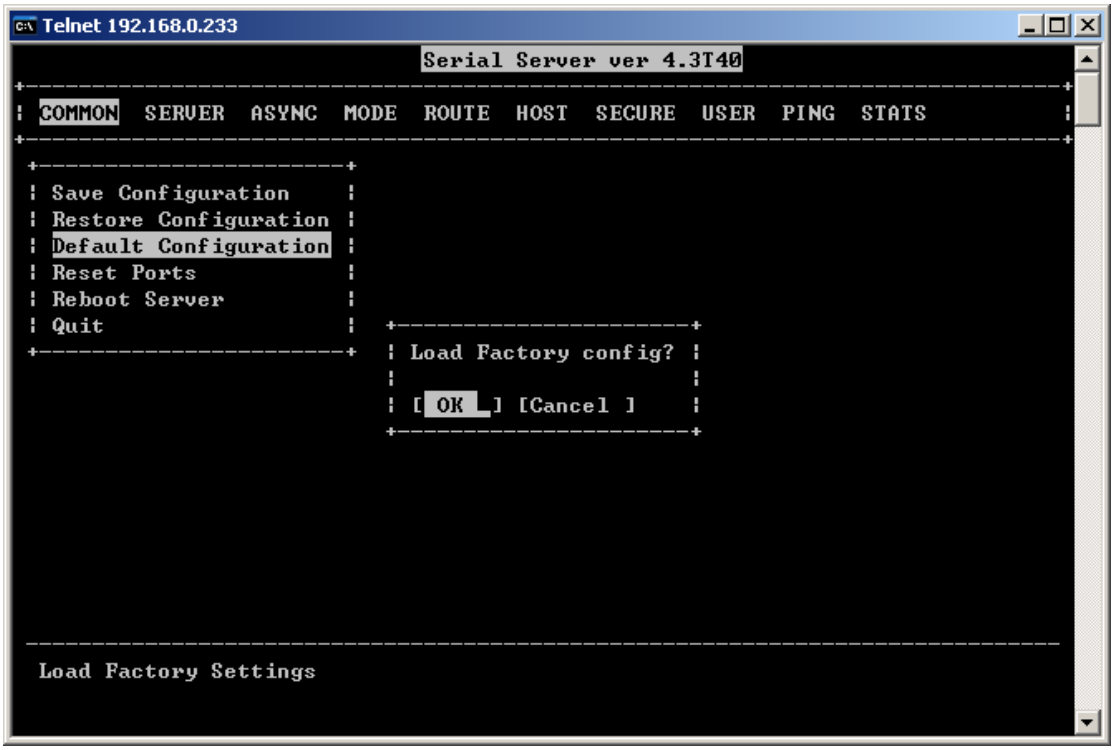




6. How to reset to factory defaults settings

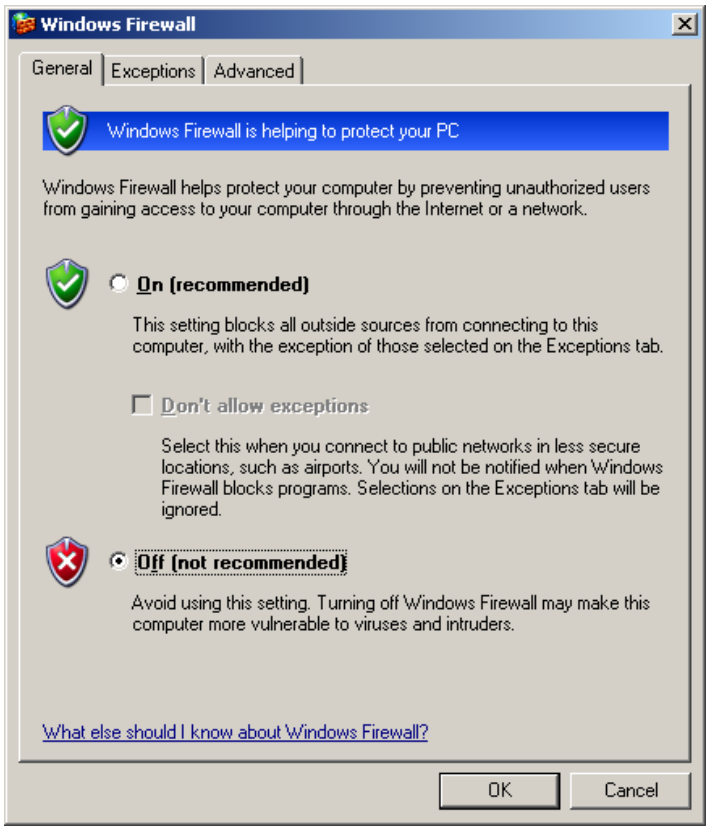
6.1 Reset by Web Console

6.2 Reset by Telnet

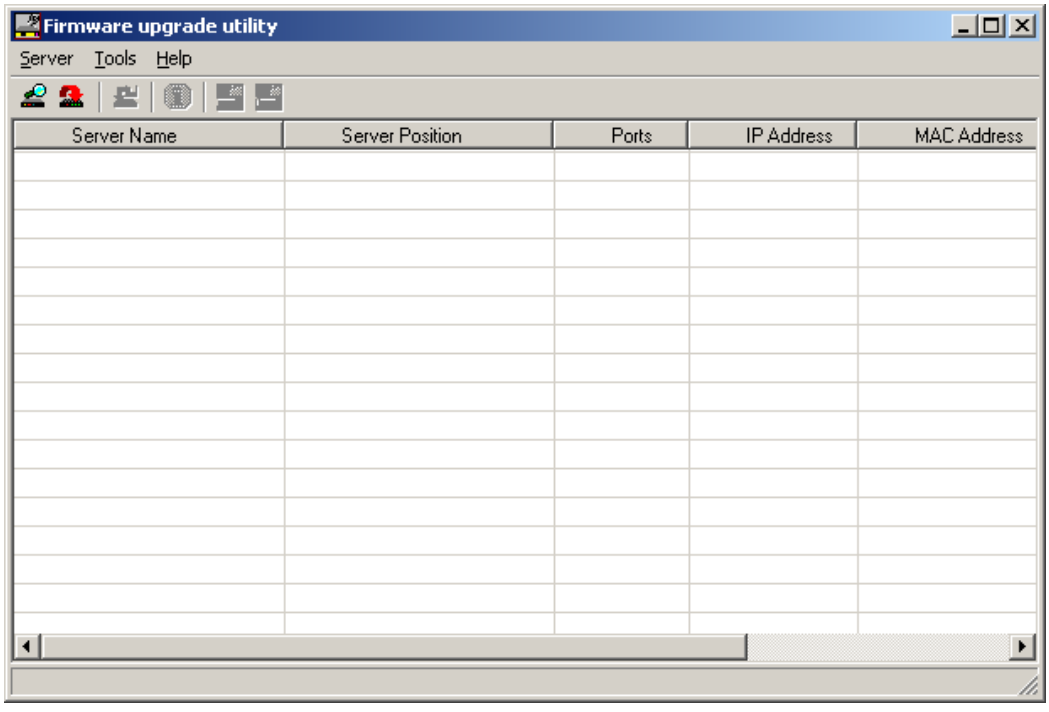


7. Firmware Upgrade Utility

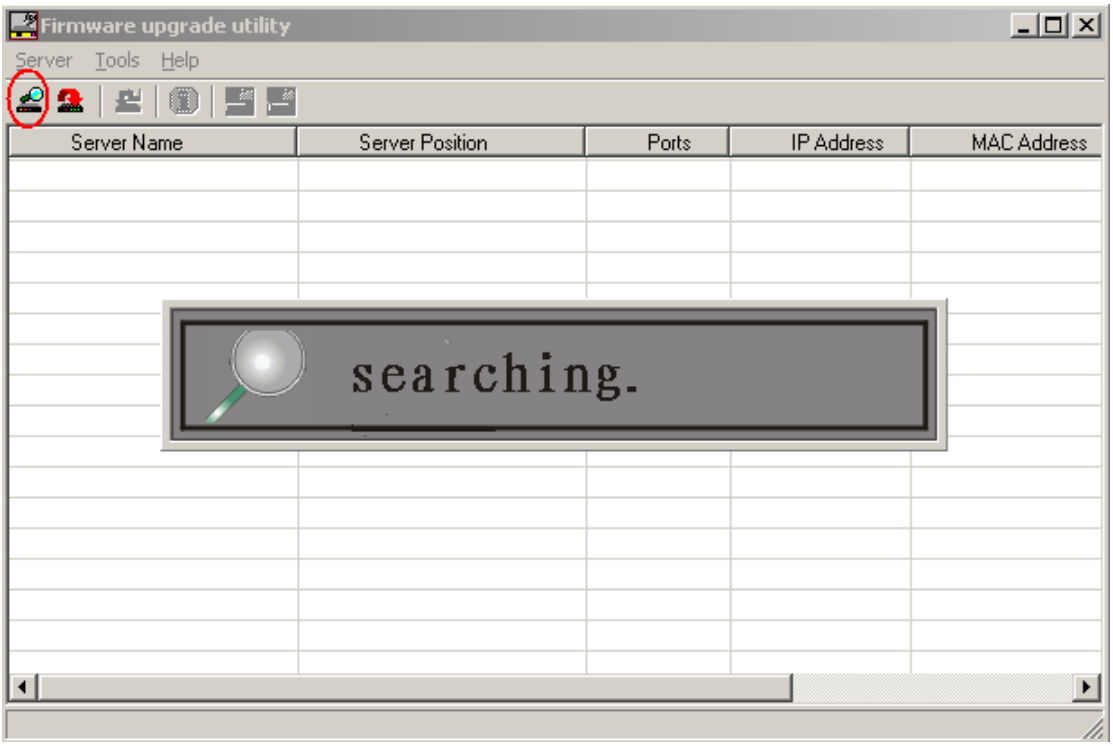
We provide firmware upgrade utility tool to upgrade firmware, please disable Windows firewall before launching the tool.

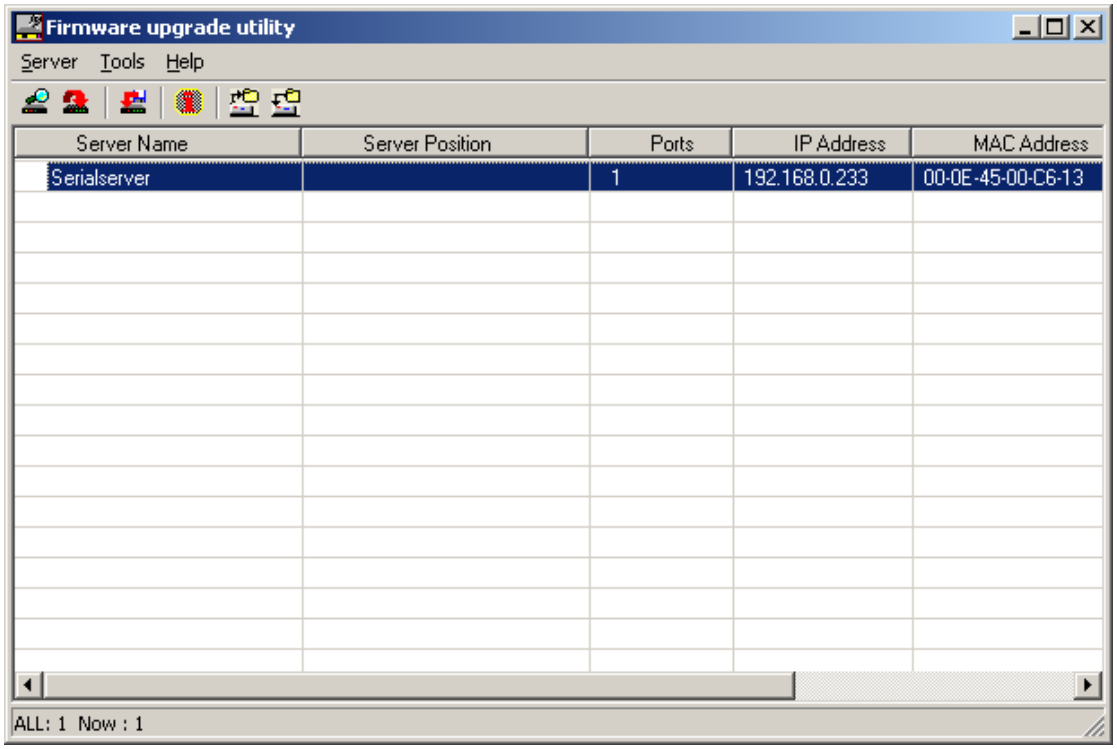

Windows Firewall
General
Exceptions
Advanced
Windows Firewall is helping to protect your PC
Windows Firewall helps protect your computer by preventing unauthorized users from gaining access to your computer through the Internet or a network.
On (recommended)
This setting blocks all outside sources from connecting to this computer, with the exception of those selected on the Exceptions tab.
Don't allow exceptions
Select this when you connect to public networks in less secure locations, such as airports. You will not be notified when Windows Firewall blocks programs. Selections on the Exceptions tab will be ignored.
Off (not recommended)
Avoid using this setting. Turning off Windows Firewall may make this computer more vulnerable to viruses and intruders.
What else should I know about Windows Firewall?
OK
Cancel

Double click the utility tool to launch it:

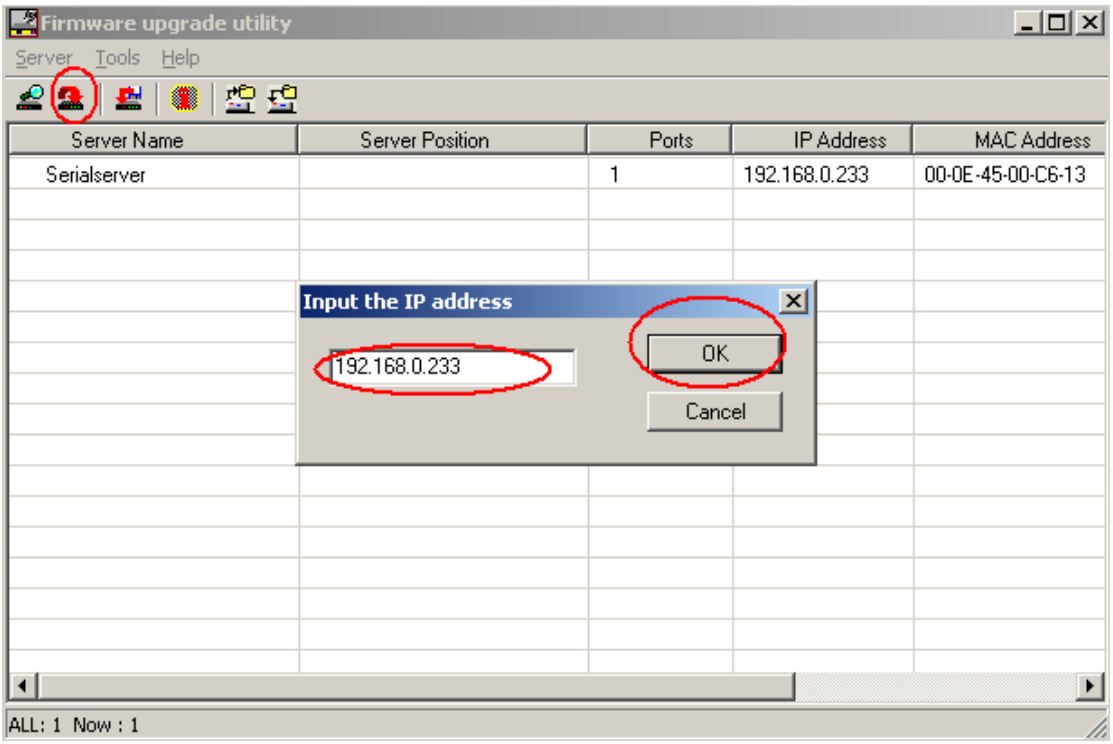


Click “Search” button to search SE1001:

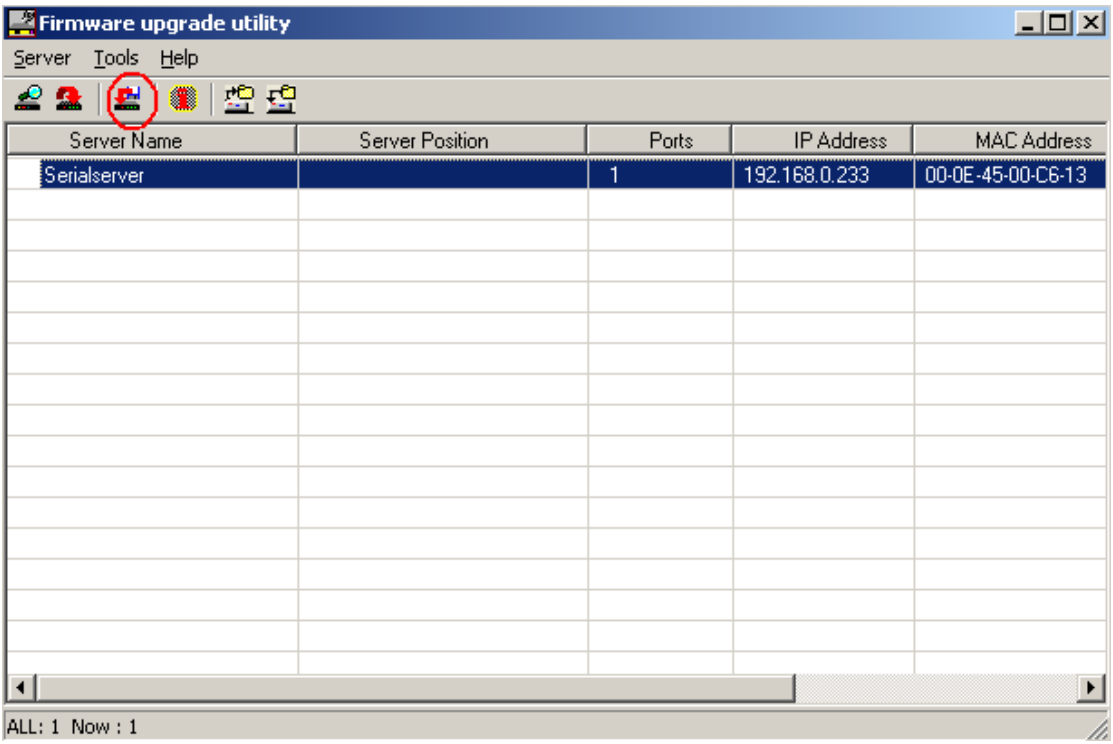




Click “Connect to a device”, then input the server IP:



Click “Upgrade firmware” and select the right firmware, SE1001 will upgrade the firmware via the utility tool.



User can also download and upload SE1001 server via the utility tool.

8. Support

In case you have problems with the installation and use, please address them to the Technical Assistance Department by e-mail support@greentel.cn.

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